UNITED STATES MARINE CORPS
MARINE CORPS BASE
QUANTICO, VIRGINIA 221346001

MCBO P5100.1B
B 51
25 FEB 2002

MARINE CORPS BASE ORDER P5100.1B

From: Commanding General
To: Distribution List

Subj: MCB SAFETY AND OCCUPATIONAL HEALTH PROGRAM
(SHORT TITLE: MCB SAFETY PROGRAM}

Ref: (a) MCO P5102.1
(b) NAVSEAINST 8023.11
(c) MCO P5100.8F
(d) MCO 5100.19E
(e) MCO 5100.29
(f) 29 CFR 1910
(g) 29 CFR 1960

Encl: (1) LOCATOR SHEET

1. Purpose. To establish policy and provide guidelines, principles, and procedures for the administration and conduct of the installation Safety and Occupational Health (SOH) and Explosives Safety Programs. The Manual shall be implemented per the references and supplement higher authority directives to assist the CG in fulfilling his responsibilities as addressed in the above references.

2. Cancellation. MCBO P5100.1A.

3. Summary of Revision. This Revision contains a substantial number of changes and should be completely reviewed.

4. Background

a. The Occupational Safety and Health Act (OSHAct) became law in 1970 but was applicable primarily to private industry. Executive Order 12196, OSH Program for Federal Employees, was signed by the President on 26 February 1980 to guarantee equal SOH protection to Federal civilian and military personnel.

b. Coupled with the OSHAct, executive orders, and higher headquarters safety and health directives, the CG MCB, Quantico has published this SOH Manual to ensure safe and healthful places

and conditions of employment for all military and civilian appropriated and non-appropriated fund workers, working aboard MCB, Quantico. The SOH Program (hereafter referred to as "MCB Safety Program") is a Marine Corps Program and applies to all workers (military and civilian), dependents, students, tenants, contractors, and visitors aboard the Base.

5. Policy

a. It is the policy of the CG MCB, Quantico, to implement a proactive mishap prevention program that establishes force protection and preserves warfighting and support manpower, equipment, and material to the extent possible through the application of an effective and continuous safety, to include explosives safety, and occupational health program.

b. All levels of command shall establish and maintain an aggressive force protection SOH program to enhance training and the Marine Corps warfighting capability by preventing mishaps and reducing personnel and material losses aboard this Base.

c. Force protection, including hazard awareness and risk management, shall be fundamental elements in all aspects of Base operations and training.

6. scope. This Manual applies to all military and civilian personnel, to include their dependents, while on MCB, Quantico. It applies to all Marine Corps facilities, equipment, and materials and is in effect on and off this Base, as applicable. It also applies to tenant activities as reflected in the host/tenant agreements, Interservice Support Agreements (ISSA), and to contractors whether or not specified in a service agreement.

7. Responsibilities

a. CG MCB, Quantico. Overall, is responsible for compliance with the Marine Corps SOH standards and this program per the references.

b. Director, Safety Division. Develop and monitor the SOH program at MCB, Quantico on behalf of the CG for all activities per the references, directives, and ISSAs. Safety Director reports directly to the CG MCB, Quantico, per reference (c).

c. Commanders, Division Directors and Activity Heads. The conduct and implementation of an effective safety and health program

is a basic leadership responsibility. This commences with the most senior CG and includes all levels of leadership as well as the individual Marine and civilian worker. cos, division directors, and activity heads are responsible to institutionalize, implement, and sustain an aggressive SOH Program within their commands or activities. The following are minimum requirements outlined in references (a), (b), (c), (d), and (e). Other requirements and responsibilities are contained throughout this Manual.

(1) Appoint, in writing, at least one knowledgeable officer, NCO, (sergeant or above), or civilian worker to represent the CO/Director as the Unit Safety Representative (USR). Updates are required no later than 30 October each fiscal year. A copy of the USR appointment letter is to be sent to the CG MCB (B 51). Minimum appointment time is 18 months.

(2) Budget for and procure all safety devices and government furnished personal protective equipment necessary for the type of work being accomplished.

(3) Ensure mishaps involving personnel and/or government property are investigated and reported per reference (a) and this Manual. This includes preparation and submission of mishap investigation reports to CMC (SD), as appropriate, ensuring the Base Safety Division and Naval Safety Center are information addressees.

(4) Ensure mishap prevention and safety program instructions are current and maintained by supervisors for their organization.

(5) Ensure that SOPs are written on all hazardous duties performed within their command/activity, as determined by the supervisor of the work section.

(6) Ensure the Safety Division is notified of al.1 mishaps involving personal injury or property damage (USMC/GOVT) within 24 hours. The Director, Safety Division must be immediately notified telephonically (703-784-2866 or through the MCB Duty Officer) of all serious injuries and/or fatal mishaps.

d. The AC/S G-5 ensures that all construction, maintenance, and service contracts contracted by Public Works Branch or the Regional Contracting Office contain clauses requiring contractors comply with OSH Administration, the Marine Corps, and Base safety precautions and regulations. Contract monitors will enforce mandatory safety requirements on all contractor operations to ensure MCB, Quantico personnel and property are not exposed to unsafe or unhealthful conditions.

e. Supervisors. Supervisors are the key to a successful mishap prevention program. They, particularly first line supervisors, have direct daily contact with the work force and operations under their cognizant authority, and are in the best position to influence safe work practices and behavior. To ensure a proactive approach to mishap prevention, supervisors shall:

(1) Provide personnel under their direct supervision, and document, worker safety training designed to identify the following per reference (g):

(a) Policies, procedures, and programs contained in this Manual and in their activity/shop safety programs and SOPs that apply to their operations.

(b) Hazards and safety precautions for all machines, tools, chemicals, equipment, and work processes/environments that they use or are subjected to in the performance of their duties.

(c) The need for, and proper use of, safety equipment, clothing, and other protective equipment necessary to protect workers working in potentially hazardous/unhealthy environments.

(d) Mishap notification procedures.

(2) Maintain records of training to keep activity and branch heads informed of training problems.

(3) Initiate appropriate abatement and followup action until abatement has been completed for any unsafe or unhealthful condition or act involving their personnel, geographical area, or operation.

(4) Conduct weekly walk-through inspections of their area(s) of responsibility to detect and eliminate any unsafe or unhealthful conditions. Any hazardous conditions noted and corrective actions taken must be documented.

(5) Ensure workers are provided with required personal protective equipment (PPE), and ***enforce*** the use of required PPE by all workers.

(6) Report all "lost work day" or "no lost workday" mishaps to Base Safety and the unit USR, and commence a thorough mishap investigation,

(7) Ensure that all personnel receive thorough and continuous, supervisor conducted, worker safety orientation and training that is designed to prevent mishaps and encourage/enforce work safety per reference (f). Assistance is available from the Safety Division in MCBO P5100.1A in this regard.

(8) Ensure DD Form 2272, DoD SOH Protection Program, is completed and posted in primary work centers. These forms are available at the Base self-service store.

(9) Post a copy of the CG's Safety Policy letter in each work center/section. Copies can be obtained by contacting the Base Safety Division, Lejeune Hall, Room 101.

f. USR

(1) Attend an initial USR training program conducted by the Base Safety Division within 30 days of being designated a USR.

(2) Keep CO/Director apprised of safety issues affecting their organization.

(3) Act as the supervisor's point of contact for safety matters.

(4) Conduct building/workplace inspections on a monthly basis maintaining records of all safety/health discrepancies, corrective actions/abatement procedures.

(5) Oversee the completeness of applicable safety instructions within individual organizations.

(6) Maintain a turnover notebook of applicable instructions, guidelines, checklists, and information germane to a particular USR position.

(7) Work with supervisors to initiate corrective action, with guidance from the Safety Division if necessary, for identified hazards.

(8) Initiate, advise, and oversee the submission of all required mishap reports per reference (a) and chapter 5 of this Manual.

(9) Attend and participate in USR meetings scheduled by the Base Safety Division.

g. All Personnel. All personnel are responsible for knowing, understanding, observing, and adhering to all safety requirements applicable to their duty and work area. In addition, each individual is responsible for the following:

(1) Reporting to work rested and physically and emotionally prepared for any task assigned.

(2) Using normal caution, common sense, and foresight in work.

(3) Reporting to their immediate supervisor any and all practices, conditions, equipment, or material which they consider unsafe.

(4) Warning others that they believe to be endangered by known hazards, or of their failure to observe and comply with SOH requirements, and of possible developing hazards.

(5) Reporting immediately to their supervisor any mishap or injury, or evidence of impaired health in the course of work, regardless of how minor.

(6) Wearing/using protective clothing/equipment of the type required, approved, or supplied for the safe performance of their particular work assigned. The supervisor will ensure protective clothing/equipment availability.

(7) Certain hairstyles and beards are hazardous around machinery and open flame, and beards, as well as some hairstyles, interfere with vision or the use of respiratory protective devices. Such interference will cause the worker to be removed from hazardous work areas until corrected.

(8) Wearing safety shoes, boots, or foot protection devices which could include conductive/nonconductive shoes while working in areas identified as foot hazards. The supervisor will have or obtain the proper safety shoes/boots.

(9) Not wearing jewelry, rings, necklaces, loose scarves, ties, or loose clothing which might subject the wearer to additional hazards while working in areas so identified.

8. Action. The provisions contained in this Manual are obligatory and will be implemented through the chain of command throughout military and civilian components of the Base and tenant activities.

9. Recommendations. Recommendations concerning the Base SOH Manual are invited. Such recommendations will be forwarded to the CG MCB (B 51) via the appropriate chain of command.

10. Certification. Reviewed and approved this date.

D. L. WRIGHT
Chief of Staff

DISTRIBUTION: INTERNET

MCBO P5100.1B
25 FEB 2002

LOCATOR SHEET

Subj: MCB SAFETY AND OCCUPATIONAL HEALTH PROGRAM

Location: _____

(Indicate location(s) of copy(s) of this Manual.)

ENCLOSURE (1)

MCB SAFETY PROGRAM

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change

MCB SAFETY PROGRAM

CONTENTS

APPENDIX

MCB SAFETY PROGRAM

CHAPTER 1

SAFETY PROGRAM MANAGEMENT

CHAPTER 1

SAFETY PROGRAM MANAGEMENT

1000. GENERAL

1. The purpose of the safety program at MCB, Quantico is the preservation of resources while accomplishing the command/activity mission. Every Marine Corps member injured, while on or off duty, civilian worker, and every piece of equipment or vehicle damaged reduces Marine Corps effectiveness and degrades mission accomplishment.

2. Safety awareness is the responsibility of everyone aboard MCB, Quantico. Although overall safety program management oversight falls under the Safety Division, implementation of safety programs is the responsibility of commanders, directors, supervisors, and workers. Commander and director interest and involvement coupled with supervision are the keys to preventing mishaps.

3. Knowledge, dedication, integrity and professionalism are the cornerstones to successful mission accomplishment. A positive proactive attitude towards safety, its purpose, method and logic, is the foundation on which these cornerstones are laid. Safety is above all else, the attitude that mishaps can be prevented while accomplishing the mission.

1001. SAFETY PROGRAM MANAGEMENT AND STAFFING. Per MCO 5100.29 and MCO P5100.8, the MCB Safety Division is established as a special staff function of the CG MCB, Quantico to provide the Base with a complete and fully coordinated staff service for overall management of the Base Safety Program.

1002. SAFETY COUNCILS AND COMMITTEES. As directed in MCO P5100.8, the following safety councils/committees are hereby established and will meet on a regular basis as required by this Manual:

1. MCB Command Safety Council/Safe Driving Council. The Council's Charter (MCB Bulletin) is an integral part of this Manual. The Charter was developed by the Council members addressing responsibilities, objectives, and goals.

a. Mission. The primary mission of these Councils is to:

(1) Recommend safety policy and provide guidance and oversight for the CG MCB.

(2) Assist commanders, directors, and tenant activity heads in the implementation and execution of their organizational safety program.

(3) Review mishap statistics and selective accident reports which show developing trends. Members forward to the CG MCB (B 51) plans and procedures to effectively rewerse unfavorable trends and reduce or eliminate hazardous conditions which cause mishaps.

(4) Recommend changes in policies or procedures to minimize unsafe acts or conditions.

(5) Plan educational and promotional efforts designed to create and maintain interest in force protection and promote increased emphasis on mishap prevention.

(6) Review the minutes of the Supervisors' Safety Committee meeting for necessary action by the Council.

(7) Review actions taken to improve traffic safety issues addressed by the Safe Driving Council AD HOC Committee.

b. Meetings will be held quarterly, or more frequently at the discretion of the chairperson. The Safety Division, through the chairperson, is responsible for scheduling and notification of council meetings. Meeting notices will be sent to council members at least 20 working days in advance of each meeting. The Safety Division will provide a recorder and will distribute the minutes to council members following the approval and signature by the chairperson.

c. Specific membership of the Base Safety Council/Safe Driving Council is reflected in the appropriate Charter (Safety Council-MCB Bulletin 5420; Safe Drive Council-MCB Bulletin 5100.19).

2. Unit Supervisors 'Safety Committees

a. Mission. The primary objective of the committee is:

(1) To act as a mid-level management action group to interface with Shop Safety Committees and the Command Safety Council (through its membership). This " unit " reports to the commander or division director on its activities and makes recommendations to issues that need a higher level policy decision.

(2) To develop activity minutes for the record and for the Command Safety Council's review, if appropriate.

(3) To comply with objectives contained in reference (c).

b. Committee purposes are outlined in reference (c). Pursuant to those five purposes, committees shall address issues/concerns elevated by the Shop/Work Sections Safety Committees. A chairperson will be elected or appointed yearly. A recorder will be appointed by the chairperson. Issues that cannot be resolved or implemented by committee members will be elevated to the commander/division director. Issues or actions that may affect other organizations should be presented by the commander/division director to the Base Safety Council as new business items. Committees should review Safety Council Minutes distributed by the Safety Division.

c. Committees will meet quarterly or more frequently if circumstances warrant, at the direction of the chairperson. The chairperson will ensure copies of meeting minutes are signed and forwarded to the unit commander/division director, the Shop/Work Section Safety Committee, and the Base Safety Division.

d. Membership. COs and director of organizations identified below and all commands/activities with 500 or more military and civilian personnel will appoint mid-level management representatives from each branch or major section. Membership shall be open to a civilian employee representative when the Supervisor's Safety Committee contains or represents civilian employees. Appointees will be replaced as assignments dictate; however, members shall be appointed for a minimum of one year.

(1) Scty Bn

(2) HqSvcBn

(3) AC/S G-3

(4) AC/S G-4

(5) AC/S G-5

(6) AC/S G-6

(7) Marine Corps Community Services

(8) MCAF

(9) Training and Education Command

(10) TBS

(11) OCS

(12) Weapons Training Battalion

e. The Director, Safety Division, or representative, will act as Technical Advisor and consultant to Committee Chairpersons when requested.

3. Shop/Work Section Safetv Committees

a. Organizations or units having a population of over 500 military and civilian personnel, and organizations identified in section 1002.2 above will establish and appoint Branch level Shop/Work Section Safety Committees for activities under their cognizance. Committee membership will consist of journeyman level (military and/or civilian), selected on an annual basis by the supervisors/OICs from each major shop/unit. Supervisors having 30 or less personnel should appoint one representative. Supervisors/ OICs with more than 30 personnel should appoint two representatives (a primary and alternate). Committee chairpersons and recorders will be appointed by the appropriate Branch Head. Union representation is required to be maintained on Shop/Unit Safety Committees where there are bargaining unit members. Membership on these committees will include an equal number of bargaining unit employees named by the local union and the activity/command. Branch heads are responsible for ensuring safety issues surfacing are resolved within the organization, or, through the Unit Supervisor Safety Committee.

b. The purpose of these committees is to increase interest at the worker level, decrease the existence of hazards and elicit suggestions for corrective action, and to raise safety/health awareness and concerns to the attention of higher management when resolution at the shop/section level is not practicable. Only issues that have already been addressed directly with the immediate supervisor, or at the Shop/Section Safety Training meetings should be entertained at committee meetings. Supervisors/OICs of shops/units not included in the above list are encouraged, at their own discretion, to establish Shop/Section Safety Committees to function as outlined in this section.

c. Meetings will be held at least monthly. Minutes will be recorded at each meeting, normally typed within 5 working days,

reviewed by the chairperson, and forwarded to the Unit Supervisor Safety Committee. Copies of the minutes will be distributed to each member and shall be posted for one month in a conspicuous place accessible to **all** shop/unit members.

4. Shop/Section Safety Training Meetings. Supervisors, OICs, SNCOICs, and NCOICs will have weekly safety training meetings. These meetings need not exceed 10 minutes in length but should consist of meaningful safety/health material. Shops/units that are strictly office spaces with clerical duties only are exempt from the weekly requirement, but shall conduct monthly safety training sessions.

a. These meetings are intended to provide a means of disseminating mishap prevention material and information to all personnel, should be used as a platform for solving local safety problems, and should provide training in specific safety related areas. The meetings shall be documented with an attendance roster that clearly indicates the specific safety topic discussed at the meeting.

b. Safety problems that cannot be solved at this level will be referred to the shop/section safety committee, or the MCB, Quantico Safety Council, if there is no Shop/Section Safety Committee.

1003. POSTING OF SAFETY PRECAUTIONS

1. Posting is the display of any plate, placard, painted sign, written material, or instructions in a conspicuous place. Posted safety materials will not be removed, defaced, or covered.

2. Safety precautions will be posted by the supervisor in a conspicuous place on or near any equipment, component of equipment, or material which presents a hazard to the safety of personnel. For example, those safety precautions necessary for the safe handling, storage, and security of dangerous materials such as flammables, explosives, acids, corrosives, etc., will be posted at or near the storage space designated for those materials.

CHAPTER 2

OCCUPATTONAL SAFETY & HEALTH

CHAPTER 2

OCCUPATIONAL SAFETY & HEALTH

2000. PURPOSE. To prescribe policy and guidance for on-the-job safety and safety procedures to be followed aboard MCB, Quantico.

2001. WINTER WEATHER. Commanders, directors, supervisors, and building coordinators must ensure walkways are free of ice and snow to allow safe egress for all personnel. Outdoor maintenance areas will be cleared of ice and snow to allow access to these areas. Sidewalks and parking lots will be cleared of ice and snow as soon as possible.

2002. CONTROL OF LITHIUM BATTERIES

1. The conduct of the Lithium Battery Safety Program will be per MCO P5100.8F, chapter 15.

2. Lithium Sulfur Dioxide Batteries. During the past decade battery manufacturers have developed electrochemical cells using lithium metal anodes coupled with either thionyl chloride, sulphur dioxide, carbon monofluoride, or other cathode materials. The different electro-chemistries and hardware designs used in the various cells results in different performance and safety characteristics. Lithium cells have a high internal resistance which may limit use to low rate applications. Potential hazards may exist due to misuse of cells, the use of cells of poor design and quality, venting of toxic gases, explosions, and fires.

a. Caution must be used when handling lithium batteries. Due to potential hazards and environmental concerns, lithium batteries will be used only when mission accomplishment requires.

b. The construction and placement of lithium battery storage facilities shall be approved by MCB, Quantico Safety Division and Natural Resources Environmental Affairs Branch (NREA).

c. Branch Head Responsibilities

(1) Procure and use lithium batteries only for approved purposes.

(2) Ensure lithium batteries are stored as follows:

(a) Lithium batteries will be stored in their original containers in a cool and well ventilated shelter. MCB, Quantico Safety Division will be contacted if temperatures exceed 130 degrees F.

(b) The storage area will be isolated from other hazardous and combustible materials and used only for the storage of unused lithium batteries.

(c) The quantity of batteries stored in an area will be kept to the minimum consistent with requirements.

(3) In the event of an accident or battery malfunction, the Fire Department, Scty Bn, NREA, and MCB, Quantico Safety Division will be immediately notified.

d. The AC/S G-5, will assume overall responsibility for the proper disposal of used batteries.

2003. LEAD AND OTHER BATTERIES. Lead and other batteries will be stored, used, charged, and maintained in compliance with 29 CFR 1910 and ANSI Standards (C18.1).

2004. NEW CONSTRUCTION. All new construction, renovation, and demolition projects will be reviewed by MCB, Quantico Safety Division, Industrial Hygiene (IH), Fire Department, and NREA, prior to work commencing. No alterations to buildings or self-help projects will be completed without prior approval of the Facilities Maintenance Officer, Public Works Officer (PWO), MCB, Quantico Safety Division, IH, Fire Department, and NREA.

2005. SERVICE CONTRACTS, As appropriate, the Director, Regional Contracting Office, the PWO, and any other contracting office aboard the Base, will ensure that service contracts or contracts greater than $2500 which fall under the Service Contract Act of 1965 are reviewed by MCB, Quantico Safety Division prior to award.

2006. PURCHASING PROCEDURES. Activities responsible for purchasing equipment, material, or other supplies shall ensure that safety and health requirements are considered in the specifications.

2007. CONSTRUCTION SAFETY. Oversight authority for all construction projects rests with the PWO. The Resident Officer in Charge of Construction (ROICC) will enforce all safety and occupational health rules and regulations. The ROICC shall be contacted whenever unsafe or unhealthful conditions or acts are observed on contractor work sites. Safety Division will provide technical assistance to the ROICC, upon request,

2008. BASE ORDERS AND SOPs. MCB Orders and SOPs, or similar directives, that are issued to direct the manner in which work is performed shall include appropriate safety and occupational health (SOH) requirements. All Base Bulletins, Orders and SOPs shall be coordinated with the MCB, Quantico Safety Division. SOPs shall be updated at least annually.

2009. COLOR CODES FOR HAZARDOUS MARKINGS. Color is an effective way to alert personnel to hazards and to direct attention to maintaining a safe environment. Prior to painting, activities will consult 29 CFR 1910 for color coding requirements.

2010. SANITATION. Sanitation is the continuing act of effecting and maintaining a safe and healthful working environment. All personnel will be responsible for maintaining sanitary and healthy conditions in working, eating, drinking, sleeping, and recreation areas by removing food containers, napkins, lunch bags, cans, bottles, paper cups, and food waste to the receptacles provided for such waste.

2011. SAFE HOUSEKEEPING PRACTICES. Supervisory personnel will ensure safe housekeeping at all times. To obtain safe housekeeping conditions the following practices will be followed:

1. Provide adequate storage space for material and equipment.

2. Cabinets and/or holders for tools and portable equipment will be designated and utilized.

3. Appropriate containers for flammable/hazard materials will be provided and utilized.

4. A clean place for workers to change and wash as needed will be provided as required.

5. Daily or immediate disposal of hazardous waste, unused materials, and refuse is to be conducted per MCBOs and unit SOPs.

6. Aisles and passageways are clearly defined, properly marked, kept clear, and in good repair, with no obstructions which could create a hazard. Compliance with the National Fire Protection Association Life Safety Codes (NFPA-101) and 29 CFR 1910 is required.

7. Tools are maintained in good condition and are properly stored when not in use.

8. Hazardous materials are stored per existing instructions and this Manual.

9. Overhead storage areas are load tested and have proper load limits posted. These limits are not to be exceeded.

10. Overhead storage areas with access stairways and elevated open areas, will be equipped with all required handrails, intermediate rails, and toe boards.

11. All illumination fixtures are operational, correctly guarded, and cleaned regularly.

12. Oil, grease, coffee, water, or other spills on floors or walking surfaces will be wiped up or cleaned with approved materials immediately to prevent slips and falls.

13. Nonbuffing floor wax will never be applied over buffable floor wax (or the reverse). Such application reduces the coefficient of friction increasing the possibility of slips and falls. At no other time will any other type of wax, such as car wax, be used on floors. Manufacturers' instructions will always be followed. Wet floor warning signs will be used when maintenance and cleaning is being performed.

CHAPTER 3

REPORTING UNSAFE AND UNHEALTHY WORKING CONDITIONS

CHAPTER 3

REPORTING UNSAFE OR UNHEALTHY WORKING CONDITIONS

3000. PURPOSE. To publish instructions, guidelines, and appeal procedures for processing personnel reports of unsafe or unhealthy working conditions and to encourage worker participation in identification and prompt reporting of unsafe and unhealthy working conditions.

3001. BACKGROUND. Public Law 91-596, Occupational Safety and Health Act (OSHAct), and Executive Order 12196, OSH Programs for Federal Employees, and MCO 5100.8 establish policy guidelines and implementation instructions for the submission, evaluation, and appeal procedures for reporting and documenting unsafe/unhealthy working conditions by DoD and Marine Corps personnel.

3002. INFORMATION

1. Reporting

a. Any worker, or representative of such worker, who observes an unsafe or unhealthful working practice or condition, or a violation of a safety or health standard, should either orally advise the workplace supervisor of the condition or make written notification of the condition or practice. Copies of written notifications will be sent to installation safety and health officials and should state in reasonable detail the reasons for the report.

b. In lieu of orally reporting a deficiency to their supervisors, workers desiring anonymity may file a written report with the supervisor's name and refer the matter to Base Safety Division. All military and civilian workers are encouraged to resolve unsafe conditions or practices with their immediate supervisor/chain of command before taking further actions.

c. Upon receipt of a report, the designated safety and health official will verify the reported condition and will notify the workplace supervisor who shall initiate appropriate corrective action. Inspections and investigations, as appropriate, shall then be conducted by the Base Safety Division personnel to determine if a hazard or unsafe practice exists.

d. Within 5 working days after notification, the workplace supervisor shall advise the Base Safety Division, in writing, via the cognizant department head (or equivalent) of what corrective action has been taken on all written complaints/concerns.

e. The originator of the report shall be notified in writing within 10 working days of actions taken regarding the reported condition. This notification shall be signed by the Director, Safety Division. If the 10 workday suspense cannot be met for any reason, an interim reply, signed by the Director, Safety Division shall be made to the originator of the report.

f. If the safety officer determines that the reported condition is not unsafe or unhealthful, the originator of the report shall be advised within 10 working days by letter. This notification shall be signed by the Director, Safety Division, and will contain the rationale for the determination.

g. when a worker reasonably believes they are exposed to a safety or health hazard that presents an imminent danger (a condition or practice posing a danger that could reasonably be expected to cause death or severe physical harm immediately or before the imminence of such danger can be eliminated through normal procedures), the worker will cease the activity and notify their supervisor. The supervisor will evaluate the situation, consult the Base Safety Division if necessary, and make a decision as to whether work may proceed. If the worker is not satisfied that the imminent danger is sufficiently eliminated, they will notify the supervisor. The supervisor will immediately notify the Base Safety Division, and assign the worker to other duties, if appropriate. Thereafter, if the Director, Safety Division determines that imminent danger does not exist or has been corrected, the worker will return to work.

2. Appeals

a. If the originator of a report is dissatisfied with the determination made by the Safety Division, that person shall be encouraged to confer with the head of the safety office to discuss the matter further and attempt a resolution at the local level by appealing to the installation CG.

b. If dissatisfaction still exists, further appeals are authorized per MCO P5100.8.

3. Retention of Records. The Base Safety Division is designated as the office of record for appeals filed per NAVSEAINST 8023.11 and this Manual. Copies of reports and records of action will be retained for 5 years following the end of the fiscal year in which they occur.

4. Safety Committee. To minimize the need for filing written reports/appeals, civilian workers are encouraged to utilize the oral forum of the shop/worker safety committee to solve safety problems of a local nature. Failing resolution at this level, the problem may be elevated to a unit level Safety committee or the Base Safety Division.

3003, RESPONSIBILITIES. Supervisors will:

1. Adhere to the contents of this chapter.

2. Immediately date and time stamp the report to establish the date of receipt and expedite investigation and transmittal of responses to the Base Safety Division or the CMC (SD).

3. Make workers aware of this procedure.

4. Ensure that their actions in response to this chapter do not interfere with established grievance procedures.

5. Refrain from interfering with this hazard reporting process and from discriminating against workers who use the process.

6. At no time will a supervisor threaten or coerce a worker in any way from reporting unsafe and unhealthy working conditions to the Base Safety Division. Supervisors found conducting this practice will face disciplinary action up to and including dismissal from Federal Service.

DATE

From: _____
To: (Coanizant Authoritv)

Subj: WORKER REPORT OF UNSAFE/UNHEALTHY WORKING CONDITIONS AT MCB, QUANTICO

1. The undersigned (check one) _____ Worker, Representative of workers believes that a violation of an occupational safety and health standard exists which is a hazard to workers.

2. Specify the particular building or worksite where the alleged violation is located:

a. Building number: _____

b. Number of personnel exposed: _____

c. Responsible supervisor's/OICs/name and telephone number:

_____

d. Has this hazard been reported to the responsible supervisor/ OIC as required in paragraph 130002.1a of MCBO P5100.1B?

_____ yes _____ no

3. Briefly describe the hazard (if additional space is needed, continue on a separate sheet of paper): _____

_____

_____

4. Please indicate your desire: _____ My name may be revealed _____ My name may not be revealed.

a. Worker's signature _____
b. Worker's printed name _____
c. Worker's work location _____
d. Worker's work telephone _____
e. Date of report _____

Figure 3-1.--Worker Report of Unsafe/Unhealthful Working Conditions at MCB.

d. Worker's work telephone _____

e. Date of report _____

5. If you are a representative of workers, please state the name of the organization: _____

Signature

copy to:
Workplace Supervisor/OIC
Safety Division (B 51)

Figure 3-1.--Worker Report of Unsafe/Unhealthful Working Conditions at MCB--Continued.

CHAPTER 4

WORKPLACE INSPECTIONS AND HAZARD ABATEMENT PROGRAM

CHAPTER 4

WORKPLACE INSPECTIONS AND HAZARD ABATEMENT

4000. DISCUSSION. Significant costs accrue every year due to injuries, illnesses, and property damage resulting from workplace hazards. Inspections of all workplaces are conducted by MCB, Quantico Safety Division, Naval Medical Clinic (NMCL), and Fire Department to identify facilities, equipment, and operations that are hazardous or do not comply with applicable standards.

4001. SAFETY INSPECTIONS. Annual, High Hazard, and Spot Inspections are conducted by Safety Division personnel per 29 CFR 1910, 29 CFR 1960, MCO 3500.27, MCO P5100.8, MCO 5100.19, MCO 5100.29, MCO P5102.1, and MCBO 5100.1. An Annual and High Hazard Inspection Schedule will be published prior to each fiscal year and will be made available to each activity that will be inspected during the upcoming fiscal year. Annual Safety Inspections include a management evaluation of the activity's safety program and all facilities and operations. Designated high hazard areas will be inspected more frequently, at least semi-annually, based upon an assessment of the potential for mishaps, occupational illnesses or damage to Marine Corps/Navy property. unannounced or Spot Inspections, will be conducted when, in the judgment of the Safety Division, they will provide a more accurate assessment of operating conditions and practices.

1. Inspections will be conducted in **a** manner to preclude unreasonable disruption of workplace operations. Annual and High Hazard Inspections will be conducted with prior written notice. An in-brief and out-brief will be offered to the unit commander/ division/department head.

2. A supervisor/OIC or Unit Safety Representative of the activity being inspected should accompany the inspector. Union representation will be per applicable Marine Corps Orders, Federal Law, and appropriate negotiated agreements. Safety inspectors are authorized to deny the right of accompaniment to any person whose participation interferes with a fair and orderly inspection.

3. Imminent danger situations discovered during an inspection will be immediately brought to the attention of supervisory personnel. Affected work will be stopped and personnel, not required for abating the hazard, will be removed from the affected area. Temporary abatement action will be initiated or the operation will be

terminated. Imminent danger is defined as a hazard or unsafe act that, in all probability, will cause death or serious physical harm immediately, or within a short period of time.

4. Written reports of workplace inspections will normally be provided to the commander/division/department head within 15 days. Responses to inspection reports will be returned within 30 days of the date of the report, or as indicated in the report, signed by the commander/division/department head. MCB Form 1700/2 (EF) (figure 1-1) will be issued for hazards assigned a Risk Assessment Code (RAC) 1, 2 or 3 with appropriate interim controls to be followed until permanent corrections are made. The notice shall be posted in the immediate vicinity of the hazard and remain posted until the hazardous condition has been abated or for 30 days, whichever is later, per reference (c). Status reports, signed by the commander/division/department head, will be provided every 90 days, thereafter, until the deficiency(s) has/have been corrected. All work requests to correct hazardous- conditions shall have the risk assessment code, as assigned by the Safety Division in the inspection report, affixed to them prior to submission to G-5.

4002. HAZARD ABATEMENT. Hazardous conditions that cannot be corrected within 30 days shall be recorded in the MCB, Quantico Hazard Abatement Plan. The NMCL and Fire Department will forward a listing the first of each month of all their open RAC 1, 2, 3, 4, and 5 hazardous conditions to MCB, Quantico Safety Division for inclusion in the Base abatement plan. The plan will be available for review by recognized worker organizations.

1. The backlog of hazardous conditions will usually exceed the funds locally available for safety and health projects. Working with all members of the base staff, MCB, Quantico Safety Division will identify projects eligible for special HQMC Occupational Safety and Health funding throughout the year. Activities are encouraged to contact MCB, Quantico Safety Division with projects they consider to be possible candidates. Specific projects will be prepared by AC/S G-5.

CHAPTER 5

MISHAP INVESTIGATION AND REPORTING

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MISHAP INVESTIGATION AND REPORTING

5001. MISHAP REPORTING

1. The primary reference for Mishap Investigation and Reporting is the Marine Corps Ground Mishap Reporting Order, MCO ~5102.1, most recent version.

2. Timely investigating and reporting of mishaps and near misses is critical to preserving our force and providing a successful safety program. Proper ***investigation*** supplies the important information as to WHY the mishap occurred. Without finding the reasons (causes) why an accident or near miss happened, it means that there's the potential that the hazard or act still remains and that the mishap will happen to someone else. Proper ***reporting*** ensures that the information gained will be passed on to those who are in a position to eliminate the hazard or change policies.

3. Safety Division is responsible for the collection and statistical reporting of **all** mishaps that occur aboard MCB, Quantico. As such, the MCB, Quantico Safety Office must be promptly notified of all mishaps, whether the injured personnel or damaged equipment is attached to a Base organization or ***a*** Tenant organization. Safety Division is responsible for tracking and reporting all mishaps to HQMC and is the central clearing point for mishap information. The extent of the reporting requirements for Tenant Organizations is determined by the Interservice Support Agreement (ISSA) between the Base and the Tenant Organization. Commanders/Division/Department heads are responsible for timely mishap notifications, investigations, and reporting. Safety Division personnel will assist as requested.

4. The Supervisor's Mishap and Injury Report, MCB Form 5100/1, will be prepared by the investigator (Supervisor/NCO/OIC) of the injured personnel or damaged equipment. This form is the primary tool to "report" mishaps to Safety Division. It will be completed for all mishaps and forwarded to Safety Division within 15 days.

a. The following information applies to completing the Form 5100/1:

(1) Military personnel involved in a mishap are accounted for and tracked for reporting purposes, ON or OFF duty, ON or OFF Base. This includes Reserve personnel on active duty.

(2) Civilian Appropriated Fund and Non-Appropriated Fund employees are accounted for and tracked only during working hours, approved over-time, or if they are on orders.

b. Form 5100/1 is to be sent to Safety Division NLT 15 working days following the mishap. The investigator shall pass it up through the Unit Safety Officer or Unit Safety Representative, if one is appointed, to the **CO** or **Director.** It is important that the chain of command be informed and kept up-to-date on the status of mishaps, investigations, injuries and trends within their command/ organization. To CO/director/activity head, or their Deputy/XO, must sign the investigation report (Form 5100/1).

c. Form MCB 5100/1 (figure l-l) is available on FormFlow. There are two parts to the form, a front and back page.

d. Safety Division will act as quality control to ensure a complete investigation is reported.

5. Reports to be Submitted to the Head, Civilian Human Resources Office-Quantico (CHRO-Q)

a. The Federal Employees' Compensation Act (FECA) prescribes the use of specific reports and forms whenever an appropriated fund civilian worker of the Federal Government is injured while on duty or suffers an occupational illness or disease. MCO P5100.8 and MCBO 12810.1 outline specific guidance and instructions in this regard and will be used in preparation of required reports.

b. Workers, supervisors, and OICs are responsible for adhering to the reporting and processing procedures of the FECA when civilian workers suffer any duty connected injury or illness. The Head, CHRO-Q should be consulted for information and assistance in accomplishing responsibilities in this regard.

6. Serious Mishaps, as defined in MCO P5102.1, shall be reported to Safety Division by phone, as soon as possible. A serious mishap is one that involves any of the following:

- A fatality
- Hospitalization of three or more from one incident,
- Lost time injury or property damage as a result of explosives or chemical munitions,
- $200,000 or more of property damage,
- An injury involving a permanent total or permanent partial disability to Marine Corps personnel.

a. Serious mishaps require special investigations and reporting requirements to HQMC. Units are required to submit a Serious Mishap Report (SMR) within 8 hours of the incident. However if a Personnel Casualty Report (PCR) or an OPREP-3 message is sent, this can fulfill the requirement of the SMR as long as CMC (SD) is added to these messages as an info addressee. As with ALL mishap related messages, MCB, Quantico Safety must be an informational addressee.

7. Report of Motor Vehicle Accident, Standard Form 91

a. The driver of a government motor vehicle (GMV) will complete a Standard Form 91 report for any mishap involving a government motor vehicle.

b. A copy of all completed Standard Forms 91 will be sent by the GMV operations supervisor to the Base Safety Division.

8. Provost Marshal Office (PMO) Daily Blotter, Government Operated Vehicle (GOV)/Privately Owned Vehicle (POV) Accident Reports, and Investigation Reports. PMO Daily Blotters relating to fire, industrial/occupational, recreational, GOV, and POV accidents resulting in injury, death, or property damage, and PMO Formal Accident Investigation Reports shall be forwarded by the PMO Operations Officer or Accident Investigation Unit to the Safety Division each working day.

9. COORDINATION WITH WORKERS COMPENSATION

a. Civilian Employees, appropriated and non-appropriated, who are injured on the job are required to notify their respective CHRO-Q for claims for Worker Compensation. Appropriated Fund Employees are covered under the FECA, while Non-Appropriated Fund Employees are covered by a separate insurance program. Supervisors are to assist the employees in reporting injuries and claims to the Personnel Offices. Copies of all CA and LS Forms will be forwarded to the installation Safety Division.

b. Due to the similar nature of much of the data, there will be close coordination between Safety Division and the Compensation Claims monitors in the CHRO-Q. The Safety Division Mishap Data Base and the Compensation Claims Data Bases will be reconciled on a regular basis. This is done in order to pick up injured personnel that may not have been reported accurately to either Safety or Personnel. Also, the combined information gives a greater accuracy in finding out the actual costs, immediate and long-term, associated with mishaps.

SUPERVISOR'S MISHAP AND INJURY REPORT

TO: SAFETY DIVISION (B 51) PHONE: (703) 784-2866

1. INJURED PERSON *(Last Name, First, Mi)*				
2. AGE	*3.* SEX	4. PAY GRADE/RANK	5. MOS/OCCUPATION/TRADE	6. TRAINING/CERTIFICATION
7. ACTIVE/RESERVIST/OFFICER CANDIDATE/CIVILIAN			8. JOB ASSIGNMENT	9. YEARS OF EXPERIENCE
10. REPORTING ACTIVITY/UNIT (Command, Division, Activity)			11. DUTY STATION	

12. CHECK ONE ***(Or More, if Applicable)***

☐ FATALITY ☐ INJURY ☐ OCCUPATIONAL ILLNESS

☐ PERMANENT TOTAL DISABILITY ☐ PERMANENT PARTIAL DISABILITY ☐ PROPERTY DAMAGE

13. DATE OF INJURY (Day/Mo./Yr.)	14. DAY OF WEEK	15. HOUR OF DAY	16. ON/OFF DUTY?
17. DATE RETURNED TO WORK	18. # WORK DAYS LOST	19. # DAYS HOSPITALIZED	20. # RESTRICTED DAYS/LIGHT DUTY
21. DUTY STATUS *(At Time of Mishap)*	22. PLACE OF OCCURRENCE *(Street, Bldg, Room, etc.)*	ON BASE ☐ OFF BASE ☐	23. ASSIGNED WORKPLACE *(Occupational Mishaps Only)*
24. Witness (Name, Address, Telephone Number):			

25. DESCRIPTION OF MISHAP *(Describe circumstances and events leading to and associated with mishap in sufficient detail that reviewing authorities may gain a complete understanding of cause and effect relationships. If more space is needed use a blank sheet of paper and attach to this form.)*

26. TYPE OF MISHAP *(Describe 'How" Injury Occurred, i.e., struck by, fall, etc.)*	
27. TYPE OF INJURY/BODY PART *(Ex: FX Arm, Bruised leg/Laceration/Leg)*	*28.* SOURCE OF INJURY
29. WEATHER CONDITION	30. UNSAFE PERSONAL FACTOR *(Speeding, looked away, in a hurry, etc.)*
31. PERSONAL PROTECTIVE EQUIPMENT REQUIRED	32. PERSONAL PROTECTIVE EQUIPMENT UTILIZED
33. DoD PROPERTY, EQUIPMENT DAMAGED	34. NON-DoD PROPERTY, EQUIPMENT DAMAGED
35. TOTAL COST PROPERTY DAMAGED	36. TOTAL INJURY COST (If known)

MCB FORM 5100/1 AUGUST 2000 (EF)

Figure 1-1.--Supervisor's Mishap and Injury Report (MCB 5100/1).

SUPERVISOR'S MISHAP AND INJURY REPORT (Continued)

37. Unsafe Act (Act directly contributing 'to mishap)	38. UNSAFE/HAZARDOUS CONDITION (Unsafe condition of objects or environment)

39. CAUSE(S) /CONTRIBUTING FACTORS (i.e., Fatigure, Supervisory Error, Ineffective Policy, Procedures Not Followed, etc.)

☐ Nat yet determined, pending completion of investigation.

☐ Determined (List Cause).

40. CORRECTIVE ACTION TAKEN / CONTEMPLATED (Circle one or both, and describe).

41. SUPERVISOR SIGN BELOW		
Signature	Title; Grade, Phone Number	Date
42. UNIT SAFETY OFFICER SIGN BELOW		
Signature	Title, Grade, Phone Number	Date
43. COMMANDING OFFICER/DIVISION DIRECTOR SIGN BELOW		
Signature	Title, Grade, Phone Number	Date

MCB FORM 5100/1 AUGUST 2000 (EF) (PAGE 2)

Figure 1-1.--Supervisor's Mishap and Injury Report (MCB 5100/l)--Continued.

CHAPTER 6

PERSONAL PROTECTIVE EQUIPMENT (PPE)

CHAPTER 6

PERSONAL PROTECTIVE EQUIPMENT

6000. PURPOSE. To promulgate policy and procedures for procurement, issue, and wearing of personal protective equipment (PPE) in designated areas and operations by military and civilian personnel aboard MCB, Quantico per applicable PPE directives.

6001. POLICY

1. All personnel working in designated areas and operations will be provided appropriate PPE at government expense.

2. Designation of appropriate areas and operations will be made by the supervisor-in-charge, MCB, Quantico Safety Division and Naval Medial Clinic (NMCL), Occupational Health (OH) Branch, Industrial Hygienist (IH), based on mishap records, local conditions, and current directives.

3. All areas and operations designated as eye, foot, head, and noise hazardous shall be posted with an appropriate warning sign(s) as determine by MCB Safety Division and/or the IH.

4. Per MCO P5100.8F, chapter 13, paragraph 13000.4, managers will ensure compliance with the prescribed use of PPE and document cases of noncompliance. Managers should consider disciplinary action as a corrective measure against the offender and supervisor, as necessary.

6002. PPE SPECIFICATIONS AND REQUIREMENTS. Federal agencies and standards organizations have developed standards and specifications for the design and use of PPE and devices. Organizations shall only use those items that have been approved by:

1. Federal specifications.

2. American National Standards Institute (ANSI) specifications.

3. Recognized approval authority, such as Underwriter's Laboratories, Factory Mutual, or American Society of Testing and Materials (ASTM).

6003. TRAINING. Supervisors are responsible for providing, and documenting, training in the use, care, and limitations of PPE that is required to be worn in designated areas and operations. An audit of training records will be conducted annually by safety specialist(s) to ensure compliance with MCO P5100.8, paragraph 13003.

6004. RESPIRATORY PROTECTION. See MCBO 6260.1 for respiratory protection program requirements.

6005. EYE PROTECTION (SIGHT CONSERVATION PROGRAM). The Sight Conservation Program will be conducted in accordance with MCO P5100.8F, section 13007. Protective eyewear will be worn in all eye hazard areas where there is a possibility of eye injury from dust, abrasives, splashing chemicals, acids, bright flashes, or surges of light, i.e., welding flash. Areas designated as eye hazards will be posted with appropriate warning signs per 29 CFR Parts 1910 and 1926. Permanent, plumbed, emergency eyewash facilities meeting the requirements of part 358.1 of ANSI Standards will be provided in all areas where workers may be exposed to irritating or damaging materials. The following are some of the common types of protective eyewear:

1. Plan0 Safety Spectacles. These conventional-type spectacles, with or without side shields, and with clear hardened noncorrective lenses, are the general purpose type, They will be worn when operating lathes, sharpeners, planers, drill presses, power saws, grinders, buffers, polishers, mowers, etc. They do not provide adequate protection in operations such as welding, burning, chipping, riveting, or working with lasers.

2. Safety Spectacle Goggles, Type A. These goggles, with side shields and hardened filtered lenses, are for the protection of welders and their helpers and those working in the vicinity of welding operations. They protect against glare, flash burns, and flying particles.

3. Eyecup Goggles. These cup-type goggles with side shields and hardened clear lenses, sometimes called "chippers' goggles," are for use in occupations where large and heavy particles or flying objects with considerable velocity could injure the eye. These goggles are worn during riveting, chipping, heavy grinding, caulking, and pile driving operations.

4. Face Shields. These are made of clear or tinted plastic, either 6 or 8 inches in width, designed to shield the entire face and are for use in areas where view of the work area is desirable and flying particles are not the high impact type. They are used when lightweight material and lathe grinding operations are conducted.

5. Cover-Type Goggles. These goggles, with hardened lenses, are designed to wear over prescription or other glasses, similar to protection as provided in eyecup goggles.

6. Specialty Eyewear. There are other work situations which require special types of eye protection, i.e., laser eyewear. Supervisors will provide specialty eyewear as required.

7. Corrective (Prescription) Safety Spectacle. These glasses are used when a worker, who already wears corrective lenses, works in an eye hazard occupation or area. NOTE: Special spectacle mounting frames are available for purchase by the organization for workers who are required to wear a self-contained breathing apparatus.

a. Military personnel will submit requests through their approved source of supply with prior approval from the organizational safety officer.

b. The following apply to Civil Service personnel desiring corrective safety glasses:

(1) The employee completes MCB Form 5100/3 (EF), Safety Eyewear Request for approval and signature by the immediate supervisor. When requesting prescription safety glasses, employees must present a current prescription, handwritten, that reflects the doctor's name, address, phone number, and signature. The prescription shall contain any special requirements for the prescription such as whether the employee requires bifocal or progressive lenses. Safety glasses from the previous prescription will be surrender to the Safety Division program coordinator upon the arrival and receipt of the new safety eyewear.

(2) Supervisor will determine the need and forward approved MCB Form 5100/3 (EF) to MCB Safety Division for coordination.

(3) Safety Division will pass name and SSN to the OH Nurse for appointment scheduling. The worker will be notified by the nurse of the appointment date and time.

(4) Report with approved request to OH Nurse at NMCL for vision screening.

(5) After screening, go directly to Optometry Department for refraction if required.

(6) Immediately following the Optometry appointment, the worker returns all paper work to the Safety Division where the glasses are ordered.

(7) The Safety Division will notify the worker when eyewear is received from the contractor.

c. Civil Service personnel requesting replacement prescription safety eyewear due to damage shall submit MCB Form 5100/3 (EF) and surrender the damaged eyewear.

d. Nonappropriated fund workers and tenant activity workers will submit through their normal source of supply with prior approval from their organizational safety officer.

6006. HEARING PROTECTION

1. Hearing protection will be conducted in accordance with MCO P5100.8F, section 13005.

2. NMCL will:

a. Perform medical surveillance audiometry.

b. Fit individuals with sized ear plugs.

c. Provide hearing conservation training to personnel enrolled in the Hearing Conservation Program during an individual's annual audiometric examination.

3. Supervisor's are responsible for enrolling personnel, assigned to designated hazardous noise areas, in the Hearing Conservation Program.

6007. FOOT PROTECTION. Safety footwear is worn to provide protection for the toes from impact and compression forces. All safety footwear issued aboard base will meet ANSI 241.1 standards and shall be stamped by the manufacturer as meeting ANSI 241.1.

1. Personnel assigned duties in designated foot hazard areas will be issued safety footwear, and replacement, at Government expense. An

employee will not be reimbursed for safety footwear bought at their expense unless prior approval is granted by the activity. Toe guards may be issued in cases where foot protection is necessary on an infrequent or temporary basis.

2. The following procedures apply to the issue of safety shoes/boots aboard MCB, Quantico:

a. The requesting organization will prepare a NAVMC Form 10700 (EF), Self Service Center Shopping List, (less NSN) for the employee and send the employee to Retail Clothing Outlet (RCO) with direct support stock control (DSSC) credit card.

b. RCO will provide the employee a copy of the completed NAVMC Form 10700 (EF) when safety footwear is issued.

c. The following procedures apply when the appropriate size for the employee is not available:

(1) If the required size is a DSSC stocked size, RCO will order the footwear for the requesting activity. RCO will contact the activity when the footwear arrives.

(2) If the required size is a non-DSSC stocked item, the requesting activity will prepare a DD Form 1149 (9-PT), Requisition and Invoice/Shipping Document, and submit a requisition to the Intergrated Material Manager via Customer Service.

6008. HEAD PROTECTION

1. Head protection, for the protection of personnel from the impact of falling and flying objects and from limited electric shock and burn, shall meet the specifications of ANSI Z89.1.

2. Types of Helmets are:

a. Full brimmed

b. Brimless with beak

c. Class A, Limited voltage resistance

d. Class B, High voltage resistance

e. Class C, No voltage resistance

f. Class D, Protective for fire fighters

3. At no time will a metallic hard hat be issued.

6009. HAND PROTECTION. Appropriate hand protection will be required whenever employees hands are exposed to, or are likely to be exposed to, such hazards as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasion; punctures; chemical irritants; thermal burns; and harmful temperature extremes.

6010. ELECTRICAL PROTECTIVE DEVICES

1. Appropriate rubber protective equipment will be provided for electrical workers who perform work on energized or potentially energized electrical systems. Equipment will conform to the following references:

a. ASTM D ***120-87,*** Specifications for Rubber Insulating Gloves.

b. ASTM D ***178-88,*** Specification for Rubber Insulating Matting.

c. ASTM D ***1048-88,*** Specification for Rubber Insulating Blankets.

d. ASTM D 1049-88, Specification for Rubber Insulating Covers.

e. ASTM D 1050-90, Specification for Rubber Insulating Line Hose.

f. ASTM D 1051-87, Specification for Rubber Insulating Sleeves.

6011. PROTECTIVE CLOTHING. Supervisors will ensure employees are adequately clothed to protect against temperature extremes.

CHAPTER 7

OFF-DUTY AND RECREATION SAFETY PROGRAM

CHAPTER 7

OFF-DUTY AND RECREATION SAFETY PROGRAM

7000. PURPOSE. To establish policy and provide guidance for the Recreation and Off-Duty Safety Program. Program emphasis will be to enhance the safety and quality of life for all personnel.

7001. BACKGROUND. MCO 5100.30 and DoDINST 1000.3, provides guidance and assigns the responsibility to CMC for accident prevention and safety program development which includes sports, recreation, and home hazards.

7002. OFF-DUTY AND RECREATION SAFETY PROGRAM MANAGEMENT. Responsibilities shall be shared by the Director, Marine Corps Community Services (MCCS) Division, range safety personnel, and Safety Division representatives, commanders, and participants. Specific USMC program guidance is found in MCO 5100.30.

1. Facilities and Equipment Evaluation. Recreational facilities and equipment will meet all DoD, DON, Marine Corps, and nationally recognized safety standards.

a. Plans and specifications for recreational, administrative, and maintenance facilities will be reviewed by appropriate AC/S G-5 personnel and the Base Safety Division prior to construction or renovation.

b. The Base Safety Division is able to review all major equipment acquisitions.

7003. REQUIREMENTS. An effective inspection program requires the cooperative efforts of the Base Safety Division, MCCS Facility managers, supervisors, and MCCS safety representatives. Daily inspections of MCCS facilities and equipment will be conducted by each MCCS facility manager. Deficiencies that cannot be corrected will be reported to the Unit Safety Representative (USR) and the Director, MCCS Division. Quarterly inspections (during the seasonal use period) are required for swimming pools, beaches (if any areas become designated as such), marinas, automotive and woodworking (currently closed) hobby shops, and athletic fields. Quarterly inspections shall be conducted, written, and maintained by the MCCS

Divisional Safety Officer. The skeet/trap/shotgun range is part of a private club and will be inspected independently. A summary of findings from the above activities will be maintained by the activity USR. Annual inspections of sports and recreation facilities and equipment will be conducted by the Base Safety Division. Marine Corps Orders will be cited and nationally recognized standards will be used.

1. Indoor Facilities. Requirements and recommendations specified below will be incorporated in the MCCS Safety Program.

a. Automotive Hobby Shop

(1) Staff members will provide qualification training for patrons to safely operate power tools and equipment, hydraulic lifts, welding, and spray painting equipment. Qualifications will be recorded and maintained in the shop by MCCS management personnel. Qualification training will emphasize proper use of equipment, safety precautions, and proper use and care of personal protective equipment (PPE).

(2) Patrons will be provided with appropriate PPE. Signs will be placed on or adjacent to each piece of equipment where PPE is required. PPE will be readily available, serviceable, and its use enforced by the shop supervisor and workers. Eye protection will be worn whenever working under vehicles. When using equipment, conducting operations, or working in a designated hazardous noise area, hearing protection use will be enforced.

(3) Daily inspections of the auto hobby shop will be performed by the supervisor.

(4) Shop floors will slope toward drains equipped with oil separators per local environmental guidelines. Drain hazardous liquids into suitable marked containers. Grease, oil, water, and other liquids spilled on the floor will be cleaned immediately to prevent slipping hazards. Use an absorbent material to pick up grease and oil spills. Dispose of used absorbent material in properly marked waste containers. Oily rags must be placed in a self-closing metal container labeled, "Oily Rags Only."

(5) All welding areas will be approved by the Fire Chief, Fire Protection and Prevention Branch, Scty Bn. Only certified welders will be allowed to weld. Welding will not be done on fuel tanks until removed from the vehicle, purged, and checked for vapors by a gas free engineer. Goggles, gloves, helmets, and shields

that provide maximum eye protection shall be worn. During heavy work, flame-resistant material, such as gauntlet gloves, aprons, and leggings shall be worn. Additionally, safety shoes shall be worn when working with heavy objects. Cotton clothing shall not be worn. Woolen clothing is preferable. Sleeves and collars must be kept buttoned. Trouser cuffs shall be turned down. Ensure exhaust fans are working and have been certified within the last year.

(6) Aisles and walkways will be kept clear of parts, tools, and equipment. Valve covers, broken fan belts, wrenches, and other tools laying around the work area are trip hazards.

(7) Tools shall be free of cracks, worn parts, broken or rounded tips, chips, mushroomed or loose heads and broken handles. Extension cords and electric tools will not have broken plugs, frayed or taped insulation. Electric tools will have an intact ground wire prong or will be double-insulated. Tools will be used only for their designed purpose. Defective tools will be taken out of service and tagged. Compressed air hoses that are cracked, worn, or frayed shall be taken out of service and tagged. Compressed air must be reduced below 30 psi for cleaning dirt and dust from parts and the work area. Compressed air shall not be used to clean clothes or the body. Compressed air used for power air tools will not exceed 90 psi. Air must be shut off and all pressure in the line must be released before disconnecting the air hose from the airline.-

(8) Grinding wheels equipped with an adjustable work or tool rest will be kept with a 1/8-inch clearance between the wheel and rest; the tongue guard kept within 1/4-inch of the wheel. PPE will be worn at all times. **Side wheel grinding** is strictly prohibited unless the wheel is approved for such grinding.

(9) Instructions for the operation of electric and hydraulic lifts will be posted in the vicinity of the lift. Patrons are required to review the instructions prior to operating the lift. The facility manager will ensure familiarity with the equipment by reviewing the operating features with each patron before use. Hydraulic jack teeth clamps will be kept clean and not worn. Jack stands must be used under a vehicle whenever a hydraulic jack is used. The weight limits posted on jacks shall not be exceeded. All jacks and other hoisting devices will be load tested annually to meet the manufacturer's recommendations. This can be scheduled through the Facilities Maintenance Division. Written documentation of load testing will be noted on each jack or hoist.

(10) Vehicle exhaust is a major source of carbon monoxide. A tailpipe exhaust system will be used when vehicles are running in the shop. At no time will work be permitted in the shop with the vehicle running and the tailpipe exhaust system not in operation.

(11) There is very little exposure to asbestos in most body shops. Asbestos dust is usually associated with clutch and brake work. Dust must be vacuumed from the drums and floor with a special vacuum that has a high-efficiency particulate air (HEPA) filter. Dry sweeping, mopping, or cleaning with pressurized air is strictly prohibited. HEPA filter use will be enforced by the shop manager.

(12) Solvents will be used in well-ventilated areas only. Appropriate PPE including goggles, gloves, and aprons will be worn.

(13) Automotive body fillers activated by chemical hardeners can cause rashes and sores. If a patron's skin comes in contact with any hardener, wash it off immediately with soap and water. Use gloves and a long sleeve shirt to prevent exposure.

(14) Electric power cables and cords will be constructed of heavy armored rubber or similar materials to prevent damage from oil and grease. Power cables and cords on all portable and fixed electrically operated equipment will be of three-wire construction and equipped with a ground prong (except double insulated tools). Power cords will not be strung across shop floors. Portable lights used in the shop area will be equipped with handle, lamp-holder, hook, and a guard attached to the lamp-holder or handle.

(15) Per NFPA-101, in each automotive repair shop, the area between the floor and a point 18 inches above the floor is considered a Class I, Division 2 explosive hazard (unless mechanical ventilation that creates four air changes per hour is present in the immediate area). Drink machines and refrigerators equipped with motors below this 18 inch limit will not be allowed in the bay areas unless equipped with explosion proof motors.

(16) Transmission jacks shall be equipped with leveling devices to prevent transmissions from rolling or falling off.

(17) "No Smoking" signs shall be posted.

(18) Plumbed eye wash stations will be tested weekly. Portable units will be checked quarterly. Facility managers will keep written documentation of these inspection.

b. Spray Painting

(1) The health hazards associated with spray painting operations require special precautions. Patrons will be apprised of these hazards and the safe working practices necessary to protect themselves. Patrons will also be supervised throughout the spray painting evolution. A recommended summary of spray painting hazards and safe operating procedures will be available by the Auto Shop staff.

(2) Spray painting operations using compressed air spray guns or airless spray guns shall be conducted inside a paint booth. Local exhaust ventilation will be in operation at all times when paint materials are being used. Spray painting with aerosol spray cans should be conducted inside a paint booth.

(3) Gloves shall be worn to prevent prolonged or repeated contact with paint materials. Most types of protective gloves can be used with water-based paint. Manufacturer's Material Safety Data Sheets shall be consulted for specific glove types to be used with other paint materials.

(4) Splash-proof goggles will be worn at all times while using paint materials (mixing, brushing, rolling, or spraying). A full-length face shield may also be required when engaged in spraying operations.

(5) A face shield in addition to eye goggles is required when pouring or mixing paint materials such as paint strippers or thinners.

(6) The use of a coverall with sleeves rolled down is mandatory for spray-gun painting. Coveralls are not required for touch-up jobs.

(7) A head covering is required when painting above waist level. In most instances, a utility cap is sufficient. The use of a hood is desirable when spray-gun painting.

(8) A protective skin cream on exposed parts of the skin shall be used when using materials that contain sensitizers (e.g. vinyl, vinyl-alkyd, polyurethane, epoxy or alkyd paints). The use of a skin cream is recommended for spray-gun painting.

(9) Consolidate paint materials into the least number of containers and return them to the flammable liquid storage cabinet, paint locker or flammable storeroom at the end of the work shift. Keep paint containers closed.

c. Gymnasiums

(1) Racquetball and basketball courts shall be free of obstructions on their surfaces, around their edges, and overhead. Court floors will have a smooth finish and be free of splinters and slippery substances. All lights shall be adequately shielded to protect them from breakage or damage. Portable and stationary bleachers shall be inspected every 2 years by Facilities Maintenance personnel. Daily inspections will be conducted by the facility staff.

(2) Locker and shower rooms shall be kept neat, clean, and free of slip or trip hazards. Floor surfaces in, and immediately outside, shower rooms will be made of nonslip or abrasive material to permit good footing. Shower room light fixtures will be suitable for damp locations.

(3) Weight rooms shall have safety procedures posted. Proper warm-up and operating instructions must be conspicuously posted. Minimum clearance may vary; however, a safe distance shall be maintained to ensure the safe operation of equipment as established by the manufacturer. Collars or clamps shall be used for free weights. A spotter or an automatic spotter is required for bench pressing. A weight belt is also recommended when lifting free weights. Free weights will be stored on racks when not in use.

(4) It is recommended to maintain a minimum clearance of 3 feet from basketball sidelines and end lines, where physically possible. It is recommended that walls within 3 feet of end lines and sidelines be padded to a height of 6 feet. Floor mats should be provided at each basketball court entry point to allow players to clean their shoes prior to entering the court. All liquid spilled onto the court will be mopped up immediately.

(5) Doors on racquetball and handball courts should open inward. Doorknobs and handles should be recessed on the inside of racquetball and handball court doors. The requirement to wear approved racquetball eye protection will be conspicuously posted. Wearing of eye protection, while playing racquetball, shall be enforced by the MCCS staff. Personnel refusing to properly wear eye protection will not be allowed to continue to play. Racquetball eye protection shall be made of polycarbonate or similar material, have side protection and meet American Amateur Racquetball Association specifications. Racquetball rackets will be equipped with wrapped handles and wrist straps. Racquetball spectator areas shall be designated.

(6) Sauna construction shall meet or exceed industry standards and be approved by the Fire Chief, Fire Prevention Branch, Security Battalion, and the Director, Safety Division before installation. A thermostatic control device shall be installed which prevents the sauna from exceeding 200°F. The temperature in steam rooms shall not exceed 120°F. Thermostatic control devices will only be accessible to MCCS staff. Carpeting shall be not be used for floor covering. A sign shall be conspicuously posted, listing rules for operations and use. Heaters shall be shielded to prevent burns. Saunas and steam rooms will be equipped with an alarm that activates in an emergency. Lighting fixtures will be suitable for damp locations. Temperature readings will be checked a minimum of twice daily by an MCCS Safety representative. Prior to closing the facility for the night, heaters will be turned off.

2. Outdoor Facilities

a. Camp Grounds and Picnic Areas

(1) A well-drained, gently sloping area is preferred. Sites shall be free of rock outcrops and heavy undergrowth. Weeds shall be regularly cut to prevent coarse stubble from developing and to reduce insect, snake and small animal infestations, If a lake shore is considered, it shall be on solid beach, free of boggy areas and caving banks.

(2) Campgrounds and picnic areas shall be provided with an adequate supply of safe drinking water. Water hydrant stations with non-threaded, self-closing faucets, properly drained to prevent standing water, shall be provided within 150 feet of the camp site and individual picnic area. In locations where a water system is not available, a potable water source shall be provided from a central pickup station. Non-potable water systems shall be adequately identified to prevent consumption. If temporary facilities are provided for pop-up trailers and recreational vehicles, adequate potable water and sewage facilities shall be provided.

(3) Durable, waterproof and rodent proof 32 gallon trash containers shall be provided near the access road and a maximum of 150 feet from any camping or picnic area. These containers shall be stationary to minimize being overturned by animals. They shall be equipped with lids and be maintained in a clean and odor-free condition at all times. The use of 55 gallon drums as containers shall be discouraged because when filled, their large size makes them difficult to empty and clean. Trash and garbage shall be removed daily. More frequent collections may be necessary. Ashes should be

removed from grills and cleaned after each use with a coarse bristle wire brush. In areas where water under pressure is available, modern comfort stations shall be located within an approximate radius of 300 feet for campgrounds and 500 feet for picnic areas.

(4) The use of chemical toilets in remote areas may be the only practical solution to sewage disposal. Frequent cleaning and maintenance should be required to avoid odors in comfort facilities. Safety awareness literature on poisonous snakes and insects should be made available for patrons.

b. Horse Stables

(1) Signs shall be posted indicating the location of emergency phones and fire extinguisher. "No smoking" signs shall be posted,

(2) Procedures for housekeeping shall be maintained. Noncombustible trash containers, for other than stall waste, shall be provided. Storage of hay or straw is prohibited in aisles.

(3) Multiple-outlet extension cords are prohibited. Extension cords will be of one continuous length, which connects one appliance to fixed receptacles. The cord shall be listed for heavy service and properly sized for the intended application. Extension cords will be used only on a temporary basis. Extension cords shall not be supported by any metal objects such as; nails, screws, hooks, or pipes. Portable electrical heating and cooking appliances shall be of the type that automatically interrupts electrical current to the heating element when the appliance is not in its normal operating position (tip-over disconnect). Portable heating and cooking appliances shall be used only in designated spaces.

(4) The storage of flammable and combustible liquids, except for medicinal purposes, shall be prohibited in the barn. Fire hydrants shall be provided within 300 feet of the building. Fire extinguishers shall be provided no more than 75 feet of travel to reach one. The facility manager should brief patrons on smoking regulations, fire emergency notification, location of fire extinguishers, and use of extension cords and appliances.

c. Marinas/Boat Rentals

(1) Patrons renting MCCS boats shall be provided qualification training by MCCS staff members which includes basic rules, knowledge of personal flotation devices, applicable safety

requirements and emergency procedures. Written qualifications will be evaluated and maintained by MCCS personnel. In addition to these minimum requirements, State of VA requirements for recreational boaters must be met. Courses are offered by state agencies, U.S. Coast Guard Auxiliary, U.S. Powerboat Squadrons, and the American Red Cross. Completion of such a course is evidence of qualification.

(2) MCCS staff members will perform an in depth pre-seasonal safety survey and abbreviated daily safety inspections of all MCCS watercraft and equipment. The MCCS Safety Officer will document quarterly inspections. The MCCS Safety Officer will assist the Base Safety Division with annual inspections of MCCS marina facilities.

(3) U.S. Coast Guard approved personal flotation devices (PFD) shall be worn while operating the following MCCS watercraft: canoes, paddleboats, personal watercraft, rowboats, sailboats without fixed keels (e.g. sailboards, lasers, hobie cats, etc.) and motor-boats less than 16 feet in length. PFDs shall be aboard and available for immediate use by operators and crew of all other MCCS watercraft. All boats, regardless of size, when used for training or if operated between the hours of sunset and sunrise (charter boats excluded) shall require the wearing of PFDs. Marina operators may set stricter requirements for use of PFDs based on evaluation of patron's qualifications, weather, and water conditions. For boats 16 feet and longer, a Type IV throwable device will be provided. PFDs shall be free of rips, tears, and other unserviceable conditions.

(4) Motorboats (except outboard and diesel) shall be equipped with a Coast Guard approved carburetor backfire flame arrestor. For boats with enclosed gasoline engines, a ventilation system is required. A Coast Guard or Underwriter's Laboratories "marine type" fire extinguisher will be provided on boats with enclosed or permanently installed gas tanks. A load-capacity plate with occupancy limits (weight, number of persons, and horsepower) shall be posted in each boat. Boats 16 feet and longer shall carry three daytime and three nighttime visual distress signals. For boats less than 16 feet in length, which are used between sunset and sunrise only, daytime signals are not required. The shelf-life date for pyrotechnic signals shall be current. Flares should be stored in ammo boxes while in the marina, if not provided with a suitable storage container. A fire symbol should also be indicated on the outside door.

(5) Boats used between sunset and sunrise will be equipped with lights. All boats less than 39 feet in length must have a sound signaling device such as a horn or whistle. For boats over 39 feet,

a bell as well as a whistle or horn shall be provided. Boaters should leave a float plan stating departure time, destination and time of return.

(6) All walking surfaces on piers and docks shall be free of protruding nails, splinters, holes or loose boards and have a slip-free surface. Adequate lighting shall be provided on piers and docks. Handrails 42 inches in height with intermediate railings should be provided for main entrance walkways to docks and piers to prevent patrons from falling overboard. At least one U.S. Coast Guard approved throwable device, such as a life ring with 60 feet of 3/8 inch diameter rope should be available on each dock. On docks more than 200 feet in length, devices shall be located at distances no greater than 200 feet apart. Fire extinguishers for Class A, B, and C fires shall be installed at each end of a pier and bulkhead that exceeds 25 feet in length. Extinguishers will be so located that traveling distance to any unit will not exceed 75 feet.

(7) The marina or boat yard operator shall post in a prominent location, or provide boat operators with, a list of safe operating procedures to include: the use of portable charcoal grills for cooking, trash disposal, no-smoking areas, location of fire extinguisher and hoses, instructions for turning in a fire alarm, and fueling instructions. Gasoline delivery nozzles shall be equipped with a self-closing control valve that will shut off the flow of fuel when the operator's hand is removed from the nozzle. An emergency fuel shut-off control switch shall be installed at least 20 feet but not to exceed 100 feet from the gasoline dispenser. The control device shall be labeled and readily accessible at all times of operation. An over-sized, high-hazard fire extinguisher shall be located on each side of the fuel dispensing area.

(8) Electrical wiring located near boat ramps shall be installed underground to avoid possible contact with masts and other parts of boats. If electrical wiring is not installed underground, the wiring within yard areas shall be routed to avoid wiring within or across any point of the yard that may be used for moving boats. Avoid wiring closer than 20 feet from the outer edge or any portion of the yard that may be used for moving boats or stepping or unstepping masts. Clearance for wiring in other portions of the yard shall not be less than 18 feet above ground in open areas and not less than 8 feet above the highest point of roofs when above buildings. Warning signs to alert operators of wire clearance shall be visible.

d. Boating on the Impounded Waters of MCB. Boating is permitted as follows:

(1) Breckinridge Reservoir. Electric motor or less.

(2) Dalton Pond. Electric motor or less.

(3) Lunga Reservoir. Outboard motor of 10 horsepower or less.

(4) R-6 Pond. No mechanical power.

(5) Barrett Pond. No boats permitted.

(6) Boating is not allowed between sunset and sunrise. However, privately owned and operated boats being used for recreational fishing or frog gigging are permitted.

(7) Boats with power in excess of the manufacturer's rating for the boat will not be permitted on impounded waters.

(8) All persons operating boats on the impounded waters of the MCB, Quantico should be qualified swimmers. Any person who is not a qualified swimmer is required to wear approved PFDs.

(9) Personnel operating boats will go to the nearest safe shore whenever adverse weather approaches. It is not necessary to return to the launch site, any safe haven will do until the danger passes.

(10) Personnel 14 years of age or under will not be permitted to operate a boat and will wear a PFD at all times;.

e. Fueling of Boats. The following rules will be followed:

(1) Fueling will be completed before dark, except in emergencies.

(2) Whenever a boat is moored at the fuel dock do not smoke, strike matches, or throw electrical switches; stop all engines, motors, fans, and devices liable to produce sparks; and turn off lights and galley fires.

(3) Before starting to refuel, verify that the boat is moored securely; close all ports, windows, doors, and hatches.

(4) During fueling, keep nozzle of hose or can in contact with fuel opening to guard against possible static sparks and ensure that no fuel spills/vapors get below deck.

(5) After fueling is completed, close fill opening; wipe away all spilled fuel; open all ports, windows, doors, and hatches; permit boat to ventilate for at least 5 minutes; and check to see that there is no odor of gasoline in the bilges or below deck spaces before starting engine.

f. Playgrounds. The following requirements and recommendations apply to playgrounds owned and operated by MCB. Also refer to specific requirements in MCO 1710.30, and the Handbook for Public Playground Safety published by the Consumer Products Safety Commission (CPSC).

(1) Playground equipment shall be carefully selected for the age group that will use it. Daily inspections of equipment and playgrounds shall be conducted by the facility manager for those playgrounds under their control (e.g. Lunga Reservoir, Crossroads Inn, Dependent Schools, Family Housing areas). Quarterly inspections shall be conducted by the MCCS Safety Officer and VA Dependent Schools System Safety Representatives with results forwarded to the Director, MCCS Division and the Director, Base Safety Division. Semi-annual inspections on all playgrounds will be conducted by the Base Safety Division. Equipment that is poorly designed or improperly installed, rusted, or deteriorated shall be tagged, "off limits," and roped off until repaired or removed. A file shall be maintained by the facility manager to record repairs. Information should include the manufacturer's name, model number, and date of purchase.

(2) Playground equipment will be located over impact absorbing material. It shall be approximately 6 to 12 inches deep. Drainage of playground areas shall ensure **a** relatively dry surface.

(3) Playgrounds near deep holes, ravines, or bodies of water, etc., shall be fenced to prevent children from wandering into dangerous areas. Family housing occupants may not place their personal playground equipment near deep holes, ravines, or bodies of water, etc. Playground equipment shall be placed a safe distance away from ball fields.

(4) Equipment shall be anchored in concrete **below** the ground. The diameter of swinging exercise rings should be smaller than 5 inches to prevent a child's head from being entrapped. Ends of bolts

and tubing on equipment shall be covered with protective caps that cannot be removed by hand. "S" hooks shall be pinched closed. Playgrounds will be free of tripping hazards such as roots, rocks, or other obstacles. Paint on equipment shall be lead-free with no peeling or chipping. Paints and other similar finishes for playground equipment should meet current CPSC regulations for lead in paint (0.06 percent maximum lead by dry weight). Purchasers of playground equipment should obtain documentation from the manufacturer that preservatives or other treatments applied to the equipment does not present a hazard to patrons. Wood structures must be free from cracking or splitting. Moving parts that could pinch or crush should be concealed on gliders, seesaws, and merry-go-rounds.

(5) Rungs on climbing equipment shall be designed with a slip-resistant finish. Additionally, rungs of climbing apparatus should be spaced evenly and far enough apart (at least 9 inches) to prevent head entrapment.

(6) A minimum clearance of 24 inches should be maintained between each swing and 30 inches from the frame structure. Swing seats shall be constructed of lightweight material such as plastic, rubber or canvas with edges rounded or smoothly finished. Free swinging ropes shall not be used because they may fray or form a loop, creating a strangulation hazard. Slides shall be equipped with 4-inch side borders for their entire length. Slides should have a protective barrier at the top to prevent falls while a child is changing from a climbing to sliding position. (For slides over 4 feet high, the barrier is to be at least 38 inches in height). The horizontal platform at the top of the slides should be at least 22 inches in length and as wide as the slide. The steps on slides should be at least 15 inches wide with a slip-resistant finish. Steps on slides should be evenly spaced with at least 7 inches and not more than 11 inches between them. Slides should have continuous handrails on both sides of their steps that allow a child to stand erect over each step. Slides should be located in a shaded area to prevent the metal from becoming hot due of the sun.

(7) Merry-go-rounds shall have handrails that do not protrude beyond the edge of the base.

(8) Covered receptacles shall be provided for disposal of trash.

(9) For other requirements refer to the specifications listed in CPSC Handbook for Public Playground Safety.

h. Playing Fields

(1) Playing fields must be kept relatively flat and free of holes, ridges, stones, and other debris. Goal post, light poles, guy wires, and exposed fence posts inside the playing field shall be padded. Padding should be 8 foot in height to prevent injury to players. Playing fields shall be marked with noncaustic materials. The soles of players' shoes will be made of rubber material only. Screw-in spikes of any material will not be allowed. Spikes or ridges on soles will be of a rubber-like substance and molded into the sole itself.

(2) MCCS staff members shall perform daily inspections during the season when the playing fields are being used. Portable and stationary bleachers shall be inspected every 2 years by Facilities Maintenance personnel. The MCCS Safety Officer shall inspect bleachers prior to each season. Facility managers will inspect them daily. Bleachers over 4 feet in height will be provided back and side guard rails with intermediate railings to prevent falls.

(3) Softball spectator bleachers should be placed behind backstops unless the height of sideline fences are 8 feet or higher. Fences under 8 feet do not adequately protect spectators while sitting or standing. Warning tracks should be provided as well as 8 feet high fences in the outfield for players' safety. The top bar of outfield fences lower than 8 feet creates a serious collision hazard for players and should be padded. Fences will be in good repair and free of sharp edges protruding into the playing area. A 20-foot-high backstop with a 5 feet overhang should be installed. Dugouts should be faced with fencing material and sidelines will be kept free of tripping hazards. Bats, practice balls, and gloves will not be allowed to accumulate along the dugout fences in the playing area. Breakaway or safety bases are highly recommended for all softball games. These bases will help reduce sliding injuries. Softball bats will be equipped with handgrips of a nonslip material. Players shall remove all watches and jewelry before games. Flat wedding bands may be worn, provided that they are taped or worn under gloved hands.

i. Recreational Shooting Ranges

(1) Archery

(a) Use of outdoor archery ranges will be limited to no earlier than one-half hour after sunrise and no later than one-half hour before sunset. The perimeter of the range shall be adequately marked with warning signs, rope, or fence material to keep out

wayward hikers. Liberal clear spaces behind and to the side of targets must be taken into account in marking the range. Range rules shall be permanently posted at access points. Only target-type arrows shall be used for range activities. Bows and arrows deemed unsafe by MCCS range personnel will not be allowed on the range. Shooting stations shall be at least 16.5 feet apart and aligned with the designated target.

(b) The range should be supervised at **all** times. Archers should not notch arrows until they have ensured that all participants have returned to the shooting line and the range is clear. All participants shall retrieve arrows at the same time. All non-compound bows should be unstrung when not in use. Bows should be hung on a ground quiver between rounds. Proper safety clothing (including hand and forearm protection, shirts without pockets, flaps or buttons) shall be worn by archers.

(2) Clay Pigeon/Skeet/Shotgun Range. The shotgun ranges at Quantico are run by the private, Quantico Shooting Club. FMFM O-8, Basic Marksmanship, shall be followed to ensure the safety of patrons. Also see personal protective equipment requirement cited in paragraph 7005.6 below.

j. Other Recreation Facilities and Activities. For other specific recommendations and requirements refer to MCO 5100.30, MCO 1710.30, and NAVMED P5010-4.

7004. PERSONAL PROTECTIVE EQUIPMENT. Use of PPE will be enforced by supervisors during all hazardous recreational activities. The following activities require specific PPE use:

1. Bicycling - Recreational bicyclists will wear light colored clothing (during reduced visibility conditions, reflective clothing will be worn). The use of ANSI or Snell Memorial Foundation approved bicycle helmets is required. Head phones for portable radios, cassette players and CD players, shall not be worn.

2. Boxing - Mouth guard, U.S.A. Amateur Boxing Federation approved protective headgear, gloves and groin protector for sparring and competition are mandatory.

3. Hunting - Blaze orange clothing per Marine Corps requirements, or VA state law, is required.

4. Karate - United Tournament Karate Rule Book approved head, mouth, groin, shin and foot protection are required.

5. Clay Pigeon/Skeet/Shotgun Range - ANSI approved protective eyewear and hearing protectors are required.

7005. RECREATION AND OFF-DUTY HAZARD ABATEMENT. Safety Division shall include recreation and off-duty hazardous conditions into the Base Hazard Abatement Log, related to MCCS activities with risk assessment codes of 1, 2, or 3 that cannot be corrected within 30 days. In most cases, hazardous conditions affect both workers and patrons. A Notice of Hazard will be posted at, or near, the location of the hazardous condition, per paragraph 4001.4 of this Manual.

7006. TRAINING. Education is vital to the success of every safety program. Quarterly hazard awareness training, seasonal sports briefs and qualification training will be provided to ensure individuals are aware of specific hazards, PPE requirements, and procedures for protecting themselves while off-duty.

1. Hazard Awareness Training. MCCS USRs and workplace supervisors will ensure quarterly hazard awareness training is conducted for their personnel. MCCS staff personnel will assist the Director, MCCS Division with the development of recreational training material. A variety of training methods and materials may be used, including: safety stand-downs, division and department briefs, supervisory briefs, videos, and guest speakers. Safety materials in the form of brochures, pamphlets, magazines, or newsletter articles shall be distributed by MCCS personnel. The Naval Safety Center's Recreation and Off-Duty Resource Manual (NOTAL) contains information about quarterly hazard awareness training. Included are lesson plans, briefing sheets, fact sheets from CPSC, U.S. Coast Guard, and the National Safety Council detailing hazardous items and products around the home. Resource manuals are available from the Commander, Navy Safety Center (Code 46), 375 A Street, Norfolk, VA 23511-4399. Documentation of the training conducted and of attendees is required to be maintained for 5 years.

2. Qualification Training. Patrons using MCB, Quantico's automotive and woodworking hobby shop equipment and recreational watercraft are exposed to serious hazards. Their qualifications for these activities will be noted and evaluated. Competent MCCS staff members will provide training to ensure patrons are qualified to safely operate power tools and equipment, hydraulic lifts, welding and spray painting equipment, and watercraft. Qualification training for watercraft is explained in paragraph 7003 2(c)(l) of this Manual.

For power equipment, safety precautions, equipment guards, and PPE will be emphasized. Automotive and woodworking hobby shop qualification guides and small boat qualification guides have been developed and are frequently updated to provide basic familiarization with these activities. They are also available from Commander, Navy Safety Center (Code 46). A record of qualifications for each of these activities will be maintained. It is recommended they be kept at each facility.

3. Sports Briefs. Intramural safety briefs will be conducted by MCCS staff members. Coaches and game officials will be briefed on rules of the game, additional league safety precautions, and personal protective equipment requirements. Proper conditioning techniques, warm-up and cool-down exercises will be discussed. Coaches shall use this information to brief their players. Documentation will be maintained by MCCS.

4. Training Records. Records for quarterly and qualification training will be maintained for 2 years. Documentation will include a log of scheduled training, dates of training and names of attendees. Each department should maintain its own training records. These records will be available for annual inspections.

CHAPTER 8

HAZARD COMMUNICATION PROGRAM

FIGURES

CHAPTER 8

HAZARD COMMUNICATION PROGRAM

8000. PURPOSE. To promulgate instructions and provide guidelines for hazardous materials onboard MCB, Quantico.

8001. BACKGROUND. After the Occupational Safety and Health Act passed, it was apparent workers were unaware of the potential effects from harmful chemicals used in their workplace. Therefore, Congress passed the 'Worker's Right To Know Law', 29 CFR 1910.1200. MCO 5100.8 adopted Occupational Safety and Health Administration (OSHA) Codes and established the Hazard Communication Program.

8002. INFORMATION

1. A Material Safety Data Sheet (MSDS) is the heart of the Hazard Communication Program. It includes specific, critical product information and must be available in the work center. For **a** sample of an MSDS, see figure 8-l.

2. Each staff member must know if a material is harmful/potentially harmful to health. Figures 8-2 and 8-3 provides this information; items listed are harmful and require an MSDS.

8003. RESPONSIBILITIES

1. Supervisors

a. Attend Hazard Communication Training provided by the Base Safety Division within 90 days of appointment as supervisor.

b. Implement a written Hazard Communication Program that relates to your organization. See figure 8-6.

c. Ensure staff understand the Hazard Communication Program and MSDS before using a hazardous material. This is accomplished through training; document training. Provide training initially and annually.

d. Initially request an MSDS on requisitions for hazardous material i.e. "It is requested the MSDS for this hazardous material accompany shipment".

e. Maintain an MSDS for each hazardous material used. Provide staff access to them. Keep them in a labeled binder in the work area. Should products be purchased that do not have an MSDS with it, request one from the manufacturer using the letter at figure 8-5.

f. Maintain a hazardous materials inventory using MCB Form 5100/4, figure 8-4, or electronically, as in a database. Safety Division inspectors will inspect this inventory during annual safety inspections.

g. Ensure hazardous materials are labeled. If a label is damaged/missing, replace it immediately. The label must list the material name, manufacturer's name and address, and relevant warnings.

2. Purchasing & Contracting Branch, Issue Points and Self Service Store, G-4 (Logistics Division).

a. Identify and note hazardous materials on requests.

b. Notify Base Safety Division when ordering a hazardous material not normally stocked.

c. Provide an MSDS with hazardous materials issued.

3. MCB Safety Division

a. Provide Hazard Communication Program training.

b. Serve as the point of contact and provide information for hazardous material and MSDSs.

DOD Hazardous Materials Information System
DoD 6050.5-LR
AS OF April 1996
Proprietary Version - For U.S. Government Use Only

FSC: 7930
NIIN: 013268110
Manufacturer's CAGE: 1A862
Part No. Indicator: B
Part Number/Trade Name: GLASS CLEANER

General Information

Item Name: GLASS CLEANER
Company's Name: LIGHTHOUSE OF HOUSTQN
Company's Street: 3530 WEST DALLAS
Company's P. 0. Box: N/K
Company's City: HOUSTON
Company's State: TX
Company's country: US
Company's Zip Code: 77019
Company's Emerg Ph #: 713-527-2505
Company's Info Ph #: 713-527-9561
Distributor/Vendor # 1:
Distributor/Vendor # 1 Cage:
Distributor/Vendor # 2:
Distributor/Vendor # 2 Cage:
Distributor/Vendor # 3:
Distributor/Vendor # 3 Cage:
Distributor/Vendor # 4:
Distributor/Vendor # 4 Cage:
Safety Data Action Code:
Safety Focal Point: G
Record No. For Safety Entry: 002
Tot Safety Entries This Stk#: 002
Status: FH
Date MSDS Prepared: 06FEB92
Safety Data Review Date: 14JUN93
Supply Item Manager: GSA
MSDS Preparer's Name: IAN SANGREE
Preparer's Company: LIGHTHOUSE OF HOUSTON
Preparer's St Or P. 0. Box: 3530 WEST DALLAS
Preparer's City: HOUSTON
Preparer's State: TX
Preparer's Zip Code: 77019
Other MSDS Number:
MSDS Serial Number: BSFVF
Specification Number: A-A-BOA
Spec Type, Grade! Class: TYPE 1: CLASS 1
Hazard Characteristic Code: N/
Unit Of Issue: DZ
Unit Of Issue Container Qty: 12 - 16 OZ BT
Type Of Container: PLASTIC
Net Unit Weight: N/K

Figure 8-1. --Material Safety Data Sheet (MSDS).

Report for NEIN: 013268110

NRC/State License Number: N/K
Net Explosive Weight: N/K
Net Propellant Weight-Ammo: N/K
Coast Guard Ammunition Code: N/K

Ingredients/Identity Information

Proprietary: NO
Ingredient: ETHYLENE GLYCOL MONOBUTYL ETHER
Ingredient Sequence Number: 01
Percent: 5.5
Ingredient Action Code:
Ingredient Focal Point: G
NIOSH (RTECS) Number: KJ8575000
CAS Number: 111-76-2
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: 25 PPM (SKIN)
Other Recommended Limit: NONE SPECIFIED

Proprietary: NO
Ingredient: ISOPROPANOL
Ingredient Sequence Number: 02
Percent: 4.5
Ingredient Action Code:
Ingredient Focal Point: G
NIOSH (RTECS) Number: NT8050000
CAS Number: 67-63-O
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: 400 PPM
other Recommended Limit: NONE SPECIFIED

Physical/Chemical Characteristics

Appearance And Odor: WATER CLEAR, MILD ALCOHOL ODOR
Boiling Point: 180F,82C
Melting Point: 25.0F,-3.9C
Vapor Pressure (MM Hg/70 F): <1
Vapor Density (Air=1): SLIGHT>AIR
Specific Gravity: <1 (WATER=1)
Decomposition Temperature: 125F,52C
Evaporation Rate And Ref: 1 CC/60 HRS (77 F)
Solubility In water: COMPLETE
Percent Volatiles By Volume: N/K
Viscosity: <1 (WATER=1)
pH: 9-11
Radioactivity: N/K
Form (Radioactive Matl):
Magnetism (Milligauss): N/P
Corrosion Rate (IPY): N/A
Autoignition Temperature: N/K

Figure 8-1. --Material Safety Data Sheet (MSDS)--Continued.

Report for NIIN: 013268110

Fire and Explosion Hazard Data

Flash Point: 125F,52C
Flash Point Method: TCC
Lower Explosive Limit: N/K
upper Explosive Limit: N/K
Extinguishing Media: WATER FOG, C02, DRY CHEMICAL EXTINGUISHER, FOAM.
Special Fire Fighting Proc: FIRE FIGHTERS SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS AND TURN OUT GEAR.
Unusual Fire And Expl Haords: NONE

Reactivity Data

Stability: YES
Cond To Avoid (Stability): STORE IN COOL DRY PLACE. KEEP FROM FREEZING.
Materials To Avoid: OXIDIZING AGENTS.'
Hazardous Decomp Products: OXIDES OF CARBON AND OTHER HYDROCARBONS
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): N/K

Health Hazard Data

LD50-LC50 Mixture: N/K
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: N/P
Health Haz Acute And Chronic: ACUTE; CONTACT WITH EYES MAY CAUSE EYE IRRITATION & POSSIBLE CORNEAL INJURY. MAY CAUSE-MUCOUS MEMBRANE IRRITATION. CHRONIC; HEADACHE, DIZZINESS, NAUSEA, VOMITING, DIARRHEA MAY OCCUR DUE TO PROLONGED INHALATION, SKIN ABSORPTION, OR INGESTION.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: N/K
Signs/Symptoms Of Overexp: EXPOSURE TO SKIN DURING NORMAL USE MAY CAUSE SKIN IRRITATION. IF IRRITATION PERSISTS, DISCONTINUE USE AND CONTACT A PHYSICIAN. CONTACT WITH EYES MAY CAUSE EYE IRRITATION.
Med Cond Aggravated By Exp: MAY AGGRAVATE PRE-EXISTING SKIN CONDITIONS.
Emergency/First Aid Proc: EYE CONTACT: REMOVE ANY CONTACT LENSES AND FLUSH WITH WATER FOR 15 MINUTES. IF SWALLOWED, DRINK TWO GLASSES OF WATER & INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY. PROLONGED EXPOSURE TO SKIN MAY CAUSE CONTACT DERMATITIS (REDNESS, AND SORENESS OF SKIN). CONTACT PHYSICIAN IF IRRITATION PERSISTS.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: FOR LARGE INDUSTRIAL SPILLS, STOP SPILL AT ONCE, CONTAIN SPILL BY DIKE OR OTHER MEANS, PUMP INTO SALVAGE TANK, WASH FLOOR WITH WATER.
Neutralizing Agent: N/K
Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH LOCAL, COUNTY, STATE, AND FEDERAL REGULATIONS.

Figure 8-1.--Material Safety Data Sheet (MSDS)--Continued.

Report for NIIN: 013268110

Precautions-Handling/Storing: KEEP CONTAINERS CLOSED. STORE IN COOL, DRY, WELL VENTILATED AREA.
Other Precautions: KEEP FROM FREEZING.

Control Measures

Respiratory Protection: NONE REQUIRED UNDER NORMAL USE. NIOSH CARTRIDGE RESPIRATOR IF VAPORS EXCEED TLV.
Ventilation: USE IN WELL VENTILATED AREA.
Protective Gloves:, RUBBER OR BUTYL
Eye Protection: USE CHEMICAL GOGGLES
Other Protective Equipment: **IMPERVIOUS APRON** & BOOTS TO MAINTAIN BELOW TLV.
Work **Hygienic Practices: N/K**
Suppl. Safety & **Health** Data: N/K

Figure 8-1. --Material Safety Data Sheet (MSDS)--Continued.

FEDERAL SUPPLY CLASSES IN WHICH ALL ITEMS MUST BE IDENTIFIED AND CERTIFIED

Federal Supply Class	
6810	Chemicals
6820	Dyes
6830	Gases; Compressed and Liquefied
6840	Pest Control Agents and Disinfectants
6850	Miscellaneous Chemical Specialties
7930	Cleaning and Polishing Compounds and Preparations
8010	Paints, Dopes, Varnishes, and Related Products
8030	Preservatives and Sealing Compounds
8040	Adhesives
Group 91 (Packaged Products Only)	
9110	Fuels, solid
9130	Liquid Propellants and Fuels, Petroleum Base
9135	Liquid Propellant Fuels and oxidizers, Chemical Base
9140	Fuel Oils
9150	Oils and Greases: Cutting, Lubricating, and Hydraulic
9160	Miscellaneous Waxes, Oils, and Fats

Figure 8-2. --Federal Supply Classes in Which All Items Must be Identified and Certified.

Federal Supply Class	Title	Hazardous Items Requiring Identification
1370	Pyrotechnics	Warning fuses, fire starter
1375	Demolition Materials	Explosive device
2640	Tire rebuilding and tire and tube repair materials	Only items containing flammable or toxic compounds
3439	Welding and brazing	Only hazardous items as cleaners, acids, flux supplies that contain or produce hazardous fumes
3610	Printing, duplicating, and bookbinding equipment	Flammable or toxic lithographic solutions
5610	Mineral construction	Hazardous items such as cutback asphalt,deck floor covering, deck and compound, sealing surface underlay compounds, and flight deck compounds
5640	Wallboard, building paper, and thermal materials	Asbestos cloth which has loose fibers or filings that may become airborne
6135	Batteries, Non-rechargeable	Lead-acid mercury primary and alkaline (with electrolyte)
6505	Drugs, biological, and official regents	Only hazardous items
6570	Photographic supplies	Only items containing hazardous chemicals, solvents, thinners, and cements
6780	Photographic sets, kits, and outfits	(See FSC 6750)

Figure 8-3.--Federal Supply Classes in Which Only Hazardous Items Need be Identified.

7510	Shop supplies	Only hazardous items, such as solvents, thinners, flammable and varnishes
8510	Certain containers	Shipping containers and pressurized containers with flammable propellants only
8520	Toilet soap	(See FSC 8510)
8720	Fertilizers	Only items containing weed and pest control or other harmful gredients, or which because of their composition are hazardous
9920	Smoker's articles and Matches	Lighter fuel and matches only

When deciding if a material in your workplace should be a part of **your** HAZMAT inventory, ask yourself these questions:

1) Is it Flammable/Corrosive/Toxic/Reactive?
2) Will it cause adverse health effects?
3) Is personal protective equipment required for its use?

If the answer to all three is "no", leave it out. If the answer to any of these is "yes", then it must be included.

Exclude

White Out
Hand Lotion
Hand Soap
Hand Sanitizer
Detergent
Glass Cleaner
Furniture Polish
Personal Items
Scouring Powder
Sweeping Compound
Sand
Glass
Salt
Metal Stock
Lumber
Abrasives

Figure 8-3. --Federal Supply Classes in Which Only Hazardous **Items** Need be Identified--Continued.

HAZARDOUS MATERIAL INVENTORY FORM

Local Control Number:

Product Name (Trade/Common):

Location: Building:

Division/Branch/Shop:

National Stock Number:

Manufacturer:

Address:

Quantity (average amount on hand):
(maximum at any one time):
(total annual use):

Product use (brief description):

Mission Essential: Yes No

Special Requirements: (disposal, storage, and special handling)

* For reference purposes, the Local Control Number is to be assigned sequentially by the Division's Safety Representative (Unit Safety Representative). Shops should consider using individual shop number as the prefix for each number, i.e., Shop- 84 would have numbers 84-001 through 84-1120.
** Please specify pounds or gallons for all quantities.
*** Paint shops provide copies of paint usage logs.

Figure 8-4.--Hazardous Material Inventory Form.

EXAMPLE

5100
B 51

Coover Precision, Inc.
Attn: E. Jones
6923 W. Hobson Blvd
New York, NY 11378

REQUEST FOR MATERIAL SAFETY DATA SHEETS

Dear Mr. Jones:

Current regulations require that we have a Material Safety Data Sheet (MSDS) on file for each potentially hazardous material used in our operations.

A survey of our operations reveals that we do not have such a form on file for the products described in the enclosure. Accordingly, we must request our procurement personnel to curtail any future orders of this material until we have obtained an MSDS. Please submit the MSDSs at Your earliest convenience for the products described in the enclosure.

Thank you for your cooperation in this matter.

Sincerely,

I. M. SAFETY MANAGER

Encl: (1) Description of Chemicals

Figure 8-5. --Sample Letter to Manufacturer Requesting Material Safety Data Sheets.

WRITTEN HAZCOM PROGRAM
(EXAMPLE)

Basic format for developing Hazard Communication Program --- Fill in blanks and type final written program for your work area)

Hazard Communication SOP for _____ (shop or branch) to be in Compliance with 29 CFR 1910.1200

1. **Purpose and Scope.** The purpose of this instruction is to ensure that _____ (shop or branch) is in compliance with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) (29 CFR 1910.1200).

2. General

a. The Base Safety Division is the overall coordinating activity for the facility program, acting as the representative of CG MCB, Quantico who has overall responsibility.

b. In brief, the substance of the HCS is:

(1) Master hazardous chemicals list.

(2) Use of material safety data sheets (MSDS).

(3) Labels and other forms of warning.

(4) Worker training in the HCS.

c. Each worker in the facility will be apprised of the substance of the HCS, the hazardous properties of the chemicals they work with, and measures to take to protect themselves from these chemicals.

3. List of Hazardous Chemicals

a. The Base Safety Division will maintain a master list of all hazardous chemicals used at MCB, Quantico and update the list as necessary.

b. The hazardous chemical master list will be updated upon receipt of hazardous chemicals at MCB and this list will be maintained at the Base Safety Division.

Figure 8-6.--Written Hazard Communication Program SOP.

c. The _____ (supervisor or foreman) will maintain a shop hazardous chemicals list of all hazardous chemicals used in _____ (shop or branch). The shop hazardous chemicals list will be updated when new hazards or chemicals are introduced into _____ (shop or branch) and a yearly inventory completed and sent to the Base Safety Division by 30 November of each year.

4. **MSDS**

a. The _____ (supervisor or foreman) will maintain an MSDS list on every substance on the list of hazardous chemicals in _____ (shop or branch). The MSDS will consist of a fully completed OSHA form 174 or equivalent. The _____ (supervisor or foreman) will ensure that _____ (shop or branch) maintains an MSDS for every hazardous material used in that area. MSDSs will be readily available to all personnel in the workplace.

b. The _____ (supervisor or foreman) is responsible for acquiring and updating MSDSs for their work locations. The _____ (supervisor or foreman) will review each MSDS for accuracy and completeness and will consult with the Base Safety Division if additional research is necessary. All new procurements for the facility must be cleared by the Base Safety Division. Whenever possible, the least hazardous substance will be procured.

c. MSDSs that meet the requirements of the HCS must be fully completed and received at the facility either prior to, or at the time of receipt of the first shipment or any potentially hazardous chemical purchases from a vendor. It may be necessary to discontinue procurements from vendors failing to provide approved MSDSs in a timely manner.

5. **Labels and Other Forms of Warning**

a. The _____ (supervisor or foreman) is designated to ensure that all hazardous chemicals in the _____ (shop or branch) are properly labeled. Labels should list at least the chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer, or other responsible party. The_____ (supervisor or foreman) will refer to the corresponding MSDS to verify label information. Immediate use containers, small containers into which materials are drained for use on that shift, by the worker drawing the material, do not require labeling. To meet the labeling requirements of the HCS for other

Figure 8-6.--Written Hazard Communication Program SOP--Continued.

in-house containers, refer to the label supplied by the manufacturer. All labels for in-house containers will be approved by Base Safety Division prior to their use.

b. The _____ (supervisor or foreman) will check, on a monthly basis, to ensure that all containers in the facility are labeled correctly and labels are up to date.

6. **Training**

a. All personnel who work with, or are potentially exposed to hazardous chemicals, will receive initial training on the WCS and the safe use of those hazardous chemicals. Additional training will be provided for personnel whenever a new hazard (not just a new chemical), is introduced into their work areas. Hazardous chemical training is conducted by _____ (supervisor or foreman). Attach a copy of course lines, training schedules, and a list of course materials for your record and distribution during your training sessions.

b. The training will emphasize these elements:

(1) Physical, chemical, and health hazards in the work place.

(2) Methods and observations used to detect the presence or release of a hazardous chemical and the means to protect against it.

(3) Protective measures and equipment and emergency procedures.

(4) Labeling requirements.

(5) Where MSDSs are located, how to understand their content, and how personnel may obtain and use appropriate hazard information.

(6) Supervisor's and contractor's responsibilities in informing each other of their specific HC program.

(7) Training on this written program (chapter 8).

c. The Base Safety Division will monitor and maintain records of personnel training, and advise the facility manager on training needs.

Figure 8-6.--Written Hazard Communication Program SOP--Continued.

7. **Contractor Workers**

a. Once a contractor is awarded a contract, they will receive written pre-construction meeting notes, by U.S. mail, which outline MCB, Quantico Hazard Communication Program (HCP). The contractor is responsible for informing their personnel on the MCB HCP.

b. MCB supervisors or foremen will provide information to contractor workers regarding any chemical hazard which may be encountered in the normal course of their work.

Figure 8-6.--Written Hazard Communication Program SOP--Continued.

CHAPTER 9

CONFINED SPACE MANAGEMENT PROGRAM

CHAPTER 9

CONFINED SPACE MANAGEMENT PROGRAM

9000. PURPOSE. To prescribe policy and guidance for the Confined Space Management Program.

9001. BACKGROUND. Personnel entering, working in, or on confined or enclosed spaces may encounter a number of potentially serious hazards. Such hazards may include; oxygen deficiency or enrichment, presence of flammable/explosive atmospheres or materials; presence of toxic atmospheres and materials; or the existence of general safety and health concerns (slippery surfaces, conduits/cables, machinery and electrical devices, and poor illumination). Confined spaces include, but are not limited to; storage tanks, process vessels, pits, vats, boilers, fuel cells, sewers, underground utility vaults, tunnels, and manholes.

9002. MCB POLICY. All confined spaces shall be considered hazardous and entry is prohibited until evaluated by a qualified person. Entry into or work in confined spaces may only be accomplished by personnel who have received mandatory, documented confined space safety and hazard recognition training.

9003. DEFINITIONS

1. Confined Space. A space large enough and so configured that an employee can bodily enter and perform assigned work; has limited or restricted means for entry or exit; and is not designated for continuous human occupancy.

2. Permit Required Confined Space. A space that has one or more of the following characteristics; contains or has the potential to contain a hazardous atmosphere; contains a material that has the potential for engulfing an entrant; has an internal configuration that could trap or asphyxiate; or contains any other serious safety or health hazard.

3. Class IV Space. Does not have or potentially have (with.respect to atmospheric conditions) a hazard capable of causing death/serious harm.

4. Class III Space. Contains contaminated atmospheres/conditions, but is not hazardous or Immediately Dangerous to Life and Health (IDHL). Such as:

a. Oxygen content greater than 19.5 percent, but less than 23.5 percent.

b. Flammables or flammable atmospheres at less than 1 percent of the Lower Explosive Limit (LEL).

c. Toxic agents below Permissible Exposures Levels (PEL).

5. **Class** II Space. Contains dangerous atmospheres/conditions, but below IDLH. Such as:

a. Oxygen content greater than 16.5 percent, but less than 19.5 percent%.

b. Flammable atmospheres greater than 1%, but less than 10 percent of the LEL.

c. Toxic agents at or above PELs, but below IDHL.

6. Class I Space. Contains IDLH atmospheres or conditions. Such **as:**

a. Oxygen content less than 16.5 percent, or greater than 23.5 percent.

b. Flammable gases/vapors at or above 10 percent of the LEL.

c. Toxic agents at a level whose 30 minute exposure will cause permanent injury or death.

9004. PROGRAM MANAGEMENT. The CG MCB shall appoint, in writing, a qualified confined space program manager (CSPM) who shall implement a program consistent with Federal, DoD, DON, and Marine Corps standards.

9005. BASIC PROGRAM ELEMENTS. The confined space entry program consists of six program elements as follows:

1. **ID** and Preliminary Evaluation. The CSPM, in coordination with commanders and supervisors, shall identify and evaluate confined spaces and identify hazards. All manholes, aboard MCB, Quantico are considered confined spaces and entry through any marked or unmarked manhole shall be conducted per this confined space program.

2. Preventing Unauthorized Entry. Supervisors shall brief workers on restrictions regarding confined spaces and secure spaces under their control. Also, confined space shall be posted with the following:

a. "UNAUTHORIZED ENTRY PROHIBITED."

b. The hazards inside.

c. Person to contact.

3. Comprehensive Hazard Evaluation. Confined spaces will be evaluated before entry. Use the entry permit to document this process. Post, file and route the permit. Evaluations shall include:

a. Initial Atmospheric Testing. Initial testing shall be performed from outside the space (drop tests or sample probes) by the qualified person or CSPM. Ensure all levels of the space are sampled.

b. Periodic and Continuous Atmospheric Testing. Many operations generate hazardous conditions and require periodic or continuous monitoring. The testing frequency and type depends on conditions and work performed. No single rule can be established for all operations and conditions. The qualified person or CSPM shall establish this.

NOTE: Calibration gases have a limited shelf life; reorder as necessary to have in-date gases. Carbon monoxide lasts 2 years; hydrogen sulfide lasts 1 year; chlorine lasts 6 months. Test equipment should be standardized. When ordering test equipment, contact the CSPM for advice. Calibration checks shall be made before and after use and logged.

4. Issuance of Confined Space Entry Permits. To enter a confined space, the entry supervisor shall request a permit from a qualified person. The request shall include a description of the space, the operation to be performed, and a list of entrants/attendants/ supervisors. Based on the comprehensive evaluation, the qualified person or CSPM shall grant the permit only if the entry or work can be performed safely. Permits shall be valid for the period specified (normally no longer than 8 hours). Only the CSPM can sign an entry permit for class I-II; the CSPM or qualified person can sign a class III. If work is interrupted (i.e., lunch) the permit is terminated; another permit must be issued. The permit shall contain the information specified in MCB Form 5100/5 (EF) (figure 9-l); the qualified person shall distribute the permit as follows:

a. One copy posted at each entrance.

b. One copy to the requesting manager.

c. One copy to the CSPM.

d. One copy to the Fire Inspector if a Hot Work Permit was issued.

5. Training and Qualifications

a. Base qualified persons shall be trained and certified by the CSPM. Training shall include use, maintenance, and calibration/ functional check of test equipment. Qualified persons shall receive at least 8 hours of initial classroom instruction and 8 hours of OJT. A minimum of 2 hours annual refresher training shall be provided. All qualified persons shall be re-certified by the CSPM annually. A certification card, valid for 1 year from date of training, will be issued to each individual completing the training.

b. Supervisors shall ensure that entrants/attendants are aware of the hazards and safety measures. The CSPM shall assist in training. Supervisors, entrants, and attendants must receive annual training.

c. Personnel required to enter confined spaces shall have this requirement included in their position description or personnel records. They shall receive a pre-placement physical examination that is based upon the type work and hazards to be performed, an annual examination based on the potential of related hazards, and a termination examination upon termination of employment or reassignment to other duties.

6. Program Evaluation. The CG MCB shall make, or cause to be made, an annual evaluation of the Confined Space Entry Program. DoD Class A and B mishaps will be investigated by the CSPM. DoD Class C mishaps or accidents will be investigated by the supervisor in charge with CSPM assistance.

9006. REQUIREMENTS FOR CONFINED SPACE ENTRY. The following apply:

1. Entrant. The supervisor shall ensure personnel are medically fit and that claustrophobic personnel are excluded.

2. Attendants. Attendants are mandatory for Class I-III Space entry. The attendants shall be listed on the entry permit. Attendants shall be equipped with radios or other communications equipment to ensure prompt emergency response. Attendants will not attempt a rescue by entering the space. Attendants shall have no other duties assigned to them during confined space entry work.

3. Personal Protective Clothing and Equipment. The required clothing and equipment shall be listed on the entry permit. The supervisor shall ensure that entrants and attendants are trained in personal protective clothing and equipment use.

4. Preparation of Spaces

a. Protection from External Hazards. Appropriate measures shall be taken to isolate the space from energy and to prevent release of hazardous material into spaces. Such measures include lockout and/or tagout of electrical/mechanical devices; blanking, blinding, removal, or misalignment of pipe sections, etc. Measures (e.g., the placement of barriers around confined spaces) shall also be taken to ensure that entrants are protected from vehicle or pedestrian traffic, dropped objects, etc. These measures will also prevent bystanders from falling into spaces, such as open manholes. Electrical lighting, or other electrical equipment in use, shall meet requirements of Class 1, Division 1 explosive-proof equipment, if a flammable atmosphere may be present. At night, lighting shall be provided around confined spaces.

b. Ventilation. Class I and II spaces shall be mechanically ventilated while occupied.

c. Space Cleaning. It is often necessary to clean the space before work can be accomplished. Agents used during the cleaning process may be hazardous or incompatible with the previous contents of the space. Also, cleaning may disturb residues and sludge, releasing toxic or flammable gases.

d. Inserting, Pressing-up and Steam Blanketing. When it is necessary to perform hot work on the exterior boundary of a confined space containing a potentially explosive or flammable atmosphere or materials, the space shall be ventilated sufficiently to eliminate the hazard. When ventilation is impractical or does not insure safety, the space shall be inserted, pressed-up, or steam blanketed, as appropriate.

9007. RESTRICTIONS

1. Class III Spaces. A retrieval system shall be used and an attendant shall be in communication with the entrant at all times.

2. Class II Spaces. Flammables, toxic agents, or deviations of oxygen content in a space may be due to the materials and conditions in the space. The cause or source of the contamination shall be identified and removed to the maximum degree possible by cleaning, ventilating, or other such treatments prior to entry. An attendant shall be stationed immediately outside the entrance to the space. **A** retrieval system shall be used. Where operations are conducted which introduce flammables, toxic agents, or oxygen deviations within the space, such as spray finishing, welding, cutting, or solvent cleaning, the following shall be observed:

a. General or local exhaust ventilation, or combination, shall be provided per Occupational Safety and Health Administration (OSHA) requirements. Air cannot be blown into class II spaces.

b. PPE shall be provided.

c. Where flammable gases or vapors are, or may be, explosion proof, spark proof, or intrinsically safe equipment shall be used and potential ignition sources closely controlled.

3. Class I Spaces. Class I Space entry shall not normally be permitted and is only authorized for:

a. Cases of rescue, emergency repair, or other extreme emergency. Entrants shall use:

(1) Self-contained breathing apparatus (positive pressure).

(2) A retrieval system.

(3) Other personal protective equipment as necessary. Emergency rescue personnel shall be standing by. Constant communication shall be maintained between the entrant and attendant.

b. External cold work may be performed, provided the work does not generate ignition sources.

c. External hot work may be performed if the interior atmosphere is not flammable, and a hot work permit has been issued by the Fire Department.

9008. SPECIAL PRECAUTIONS FOR SPECIFIC OPERATIONS

1. Hot Work. Hot work includes flame heating, welding, torch cutting, brazing, carbon arc gouging, or work which produces heat of 400 degrees Fahrenheit or more or, in flammables or flammable atmospheres, use of ignition sources such as spark or arc producing tools or equipment, static discharges, friction, impact, open flames or embers, and non-explosion proof lights, fixtures, motors, or equipment. The provisions of appropriate OSHA regulations apply to hot work performed in confined spaces, and hot work performed on closed structures or containers such as pipes, drums, ducts, tubes, jacketed vessels, and similar items. All hot work in confined spaces shall require exhaust ventilation to remove fumes. Hot work should not be performed on tanks that previously contained flammable/combustible products.

9009. EMERGENCY RESCUE PROCEDURES. The qualified person will document on the Entry Permit who to contact and how in an emergency. Normally the Head, Fire Prevention/Protection Branch, Security Battalion will provide this support. The qualified person or CSPM may establish an emergency rescue control point that is closer than the Fire Prevention/Protection Branch facilities if they deem it necessary, i.e., a class I space entry. The Fire Department has the authority to cancel a confined space permit if they feel the entry is not being conducted safely or they recognize an uncontrolled hazard.

9010. CONTRACTOR OPERATIONS. Contractors aboard MCB, Quantico:

1. The contractor shall provide a qualified person per 29 CFR ***1910,*** 29 CFR 1926.

2. Marine Corps personnel shall not issue entry permits for contractors due to the liability, except where failure to do so would create an extreme emergency and would endanger personnel and property, and may, therefore, cause even greater potential liability. Such cases shall be authorized by the CG MCB and shall be personally conducted and supervised by the CSPM, except where the nature of the emergency is so extreme that delays created by seeking the CG's approval or the personnel services of the CSPM would create a greater danger.

3. When Marine Corps and contractor personnel occupy the same space, the Marine Corps Qualified Person and a contractor representative shall issue separate permits. The contractor shall be informed of the Marine Corps findings. However, the contractor shall be informed by the contracting officer that the contractor retains legal obligation for the safety of contractor personnel. Marine Corps personnel cannot make an entry based upon an entry permit from a contractor.

CONFINED SPACE ENTRY PERMIT, MCB, QUANTICO

COMMAND: _____ WORK CENTER: _____
BLDG/COMPARTMENT/SPACE NO: _____ REQUESTED BY: _____
DATE: / / TIME: ____ PERMIT NOT VALID AFTER: _____
PURPOSE OF
ENTRY: _____

INSTRUMENT	MODEL	SERIAL	CAL DATE

INITIAL TESTS/INTERMITTENT TESTS (EVERY 30 MIN):

TESTER'S INITIALS:							
TIME:							
OXYGEN:							
LEL:							
H2S:							
CO:							
OTHER:							

ENTRY REQUIREMENTS:
LOCKOUT/TAGOUT PURGE LIFELINE SECURED SIGNS
FULL BODY HARNESS VENTILATED LIGHTING RETRIEVAL EQUIP
-RESPIRATOR __PPE -CUTTING/WELDING PERMIT __FIRE EXTINGUISHER
OTHER: _____
COMMUNICATION PRACTICE: _____
NOT SAFE FOR PERSONNEL- NOT SAFE FOR HOTWORK
NOT SAFE FOR PERSONNEL W/O PROTECTION - NOT SAFE FOR HOTWORK
SAFE FOR PERSONNEL - NOT SAFE FOR HOTWORK
SAFE FOR PERSONNEL - SAFE FOR HOTWORK
HOT WORK

ATTENDANT, PRINT/SIGNATURE: _____
ENTRANTS, PRINT/SIGNATURE: _____

SUPERVISOR, PRINT/SIGNATURE: _____
QUALIFIED PERSON, PRINT/SIGNATURE: _____
FIRE / RESCUE: 2636/2637/911 RADIO CALL SIGN: _____
SAFETY DIV: 2866 NOTIFY SAFETY OF PROBLEMS
INDUSTRIAL HYGIENE: 1674 PMO TRAFFIC:

Figure 9-1.--Confined Space Entry Permit, MCB, Quantico.

CHAPTER 10

CONTROL OF HAZARDOUS ENERGY SOURCES (LOCKOUT/TAGOUT PROGRAM)

FIGURES

CHAPTER 10

CONTROL OF HAZARDOUS ENERGY SOURCES (LOCKOUT/TAGOUT PROGRAM)

10000. PURPOSE. To promulgate instructions and provide guidelines, practices and procedures necessary to disable machinery or equipment and prevent release of potentially hazardous energy while maintenance and servicing activities are being performed aboard MCB, Quantico per 29 CFR 1910.147.

10001. RESPONSIBILITIES

1. Director, Safetv Division

a. Appoint a Lockout/Tagout (LO/TO) Program Manager.

b. Ensure program training is the responsibility of the LO/TO Program Manager.

c. Ensure LO/TO review is included in annual safety inspections.

2. LO/TO Manager will:

a. Ensure MCB Form 5100/6 is used in the preparation of SOPs for units/shops (figure 10-1).

b. Serve as POC for contractors concerning questions related to 29 CFR 1910.147. Verify that information concerning this program is published in pre-construction notes from the Head, Public Works Branch, G-4, to each contractor.

3. COs and Directors

a. Ensure supervisors under your cognizance report to LO/TO training by the Base Safety Division within 90 days of appointment to a supervisory position.

b. Ensure a LO/TO SOP is written for the organization as well as specific LO/TO procedures for each shop or other work area where machinery/equipment is maintained by authorized personnel in that shop.

c. Provide funding for required locks, tags, and applicable standards for supervisor's use.

d. Direct the development of a training program for appropriate shop supervisors.

3. Supervisors

a. Develop a LO/TO SOP for their respective shops.

b. Use MCB Form 5100/6 as an SOP and incorporate it into your work-site SOP as your written LO/TO Program. By 30 November of each year, ensure that a current SOP is forwarded to the Director, Safety Division.

c. Use MCB Form 5100/7 as a procedure checklist to determine energy source for individual machinery/equipment.

d. Ensure LO/TO SOP is available to all authorized and affected personnel during all work shifts.

e. Ensure that each worker reads and understands the SOP for their shop.

f. Supervisors are required to maintain completed MCB Form 5100/10 (EF) which lists all LO/TO procedures. These forms are subject to inspection by the Base Safety Division during Annual Safety Inspections or any other inspections.

g. Supervisors need not maintain the required LO/TO procedure when all of the following elements exist:

(1) Machine/equipment has no potential for stored or residual energy or re-accumulation of energy.

(2) Machine/equipment has a single energy source which can be readily identified and isolated.

(3) Isolation and locking out will completely de-energize and deactivate the machine/equipment.

(4) Machine/equipment is isolated from energy source and locked out during maintenance.

(5) Single lockout device will achieve locked-out condition.

(6) Lockout device is under exclusive control of the authorized worker performing the maintenance.

(7) Maintenance does not create hazards for other workers.

(8) Supervisor, in utilizing this exception, has had no accidents involving the unexpected activation of the machine or equipment during maintenance.

h. If an energy isolating device is capable of being locked out, the supervisor's energy control program shall utilize lockout.

i. Ensure that whenever replacement or major repair, renovation or modification of a machine or equipment is performed, and whenever new machines/equipment are installed, energy isolating devices shall be designed to accept a lockout device.

j. LO/TO devices shall be singularly identified; shall be the only device(s) used for controlling energy; shall not be used for other purposes; and shall meet the following requirements:

(1) Durable. Shall be capable of withstanding environment.

(2) Standardized. Shall be standardized within the facility in at least one of the following: color, shape, size, or format.

(3) Substantial. Prevent inadvertent removal.

(4) Identifiable. Indicate authorized worker and hazard.

k. Ensure all workers who routinely work around potentially hazardous energy receive appropriate training. Supervisors are responsible for presenting LO/TO training to their personnel within 1 month of employment or duty assignment. Specific information which must be transmitted includes the following:

(1) Purpose and Function of the Energy Control Program

(a) As determined by the supervisor, authorized personnel shall receive training in the methods and means necessary for energy isolation and control.

(b) Affected workers shall be instructed in the purpose and use of the energy control procedure.

(c) All other personnel shall be instructed about the procedure and prohibition relating to LO/TO.

(2) Limitations of Tags in the Tagout System

(a) **Do** not provide physical restraint.

(b) Will not be removed without authorization of authorized worker, bypassed, ignored, or otherwise defeated.

(c) Must be legible and understandable.

(d) Must be able to withstand the environment of the shop.

(e) Must not evoke a false sense of security.

(f) Must be securely attached.

(3) Worker Retraining. Retraining shall be accomplished when:

(a) There is a change in job assignments, machines/ equipment, processes or procedures.

(b) There are deviations from or inadequacies in worker knowledge or use of energy control procedures.

(c) The worker requires additional proficiency and the introduction to new or revised control methods and procedures.

(4) Certification of Workers

(a) Supervisors must certify worker training annually.

(b) Certification shall contain workers' name and dates of training.

1. MCB Form 5100/8 will be signed by workers once they are trained and maintained on file in work locations. This is subject to inspection by the Base Safety Division or other inspectors.

m. Supervisors are required to keep and maintain a safety LO/TO turnover file. The file will thoroughly list all safety training provided for that shop/unit by their supervisor. -Training literature provided by the Base Safety Division will also be maintained by the supervisors.

n. Supervisors shall appoint a worker(s) to conduct an annual inspection on every LO/TO procedure for all equipment and machinery. The inspection shall be conducted by an authorized worker other than the one(s) utilizing the energy control procedure being inspected,

0. Supervisors shall certify that annual inspections have been performed. Use MCB Form 5100/9 as an example. The certification shall be maintained on file by the supervisor subject to inspection by the Base Safety Division and other inspectors and shall include the following:

(1) Identity of machine or equipment.

(2) Date of inspection.

(3) Workers included in inspection.

(4) Person performing the inspection.

4. All Personnel. All military and civilian personnel are responsible for knowing, understanding, observing, and adhering to established LO/TO SOP regardless of whose shop installed the lock and/or tag.

5. Head, Civilian Human Resources Office-Quantico. Provide a monthly list of newly hired civilian personnel to the Director, Safety Division.

6. Head, Public Works Branch, G-4 and Chief, Regional Contracting Office

a. Ensure that figure 10-l is included in all contractor's pre-construction notes. When Public Works Branch inspectors inspect contractor operations, ensure that requirements stated in figure 10-1 are enforced.

b. Ensure contractors have a written SOP, as referenced in paragraph 10001.3b of this Manual, for all machinery/equipment they operate and/or maintain aboard the Base. Contractors are responsible for informing MCB Quantico workplace supervisors of the LO/TO procedures that will be utilized, prior to performing the work requiring the procedures.

Note: A written program must include specific methods that are used to achieve compliance with the requirements of the LO/TO Standard (29 CFR 1910.147). MCB Form 5100/6 is a sample written program for shop policy use, Supervisors are to complete the blank lines and then type a final written program for shop policy use. This written program should be maintained with your policy guidelines for your shop or branch.

MCB LOCKOUT/TAGOUT PROGRAM RELATIVE TO CONTRACT PERSONNEL

Per 29 CRF 1910.147, contractor personnel must be informed of MCB, Quantico Lockout/Tagout (LO/TO) Program. The LO/TO Program for MCB is outlined in chapter 10 of this Manual. Work locations aboard MCB have written individual SOP for LO/TO, and it is the contractor's responsibility to contact the Base work location supervisor for information specific to that particular work location.

Additionally, contractors must inform MCB, Quantico Resident Officer in Charge of Construction and Safety Division of their LO/TO Program. This is achieved by contacting supervisory personnel in the area of your contract operation. If you have any questions concerning this Program, contact the Base Safety Office at 703-784-2866.

Figure 10-1.--MCB Lockout/Tagout Program Relative to Contract Personnel.

CHAPTER 11

LAWN MOWING/TRIMMING OPERATOR SAFETY

CHAPTER 11

LAWN MOWING/TRIMMING OPERATOR SAFETY

11000 . BACKGROUND. Every year mishaps with lawn maintenance equipment cause serious injuries. These mishaps are avoidable when SOPs are written, read, and understood by all personnel.

11001. PURPOSE. To establish policy and set guidelines for lawn mowing/trimming, edging and leaf blower use, operator training, personal protective equipment (PPE) needs and other safety requirements. Title 29 CFR Part 1910, American National Standards Institute (ANSI), and the Consumer Product Safety Commission (CPSC) requirements have been adopted by the Marine Corps.

11002. ACTION. All personnel assigned to operate equipment, as part of their working duties, will complete a course in safe operating practices, sponsored by the Facilities Maintenance Officer or appropriate Battalion Safety Officers. Documentation of training will be maintained by the supervisor of the section conducting training. Instruction will include operational skills and knowledge of the following general safety rules, which apply to all lawn maintenance operations:

1. Operators must be familiar with equipment controls and safety devices. All guards will be installed on lawn equipment. Equipment will not be used if guards are deformed or missing.

2. Ensure the area is clear of all debris, personnel and pets before cutting.

3. Wear safety goggles, long pants, safety shoes, and hearing protection.

4. Audio headphones will not be worn.

5. Appropriate administrative action may be taken against operators and supervisors for failure to use PPE.

6. Check for equipment defects. Start the machine on firm, clear, level ground with feet and hands away from blades or other moving parts.

7. Arrange grass cutting so that the discharge side is never aimed toward other persons. No power mower will be operated within 10 feet of the rear of another operator. Keep children and pets away.

8. Never leave unattended engines running. Do not tamper with automatic shut off controls on any lawn equipment.

9. Stop the engine and disconnect the spark plug wire before cleaning, or working on the underside of the mower. A hot engine can start when the blade is turned if this is not done.

10. Never add fuel while the engine is running. After stopping the engine, allow at least 5 minutes to cool before refueling. Do not smoke while refueling and always refuel equipment outdoors where gasoline vapors can escape. Use only containers approved by the Underwriters Laboratory for gas storage.

11. Report equipment failure to the supervisor. Repairs should not be attempted by the operator.

11003. SPECIFIC REQUIREMENTS FOR PUSH MOWERS

1. Never push a mower up or down a slope. The safest technique is to mow across the slope. Hills or banks will not be mowed or trimmed when soggy or slippery.

2. Stop the engine before crossing gravel driveways, walks, or dirt roads to prevent projectile hazards.

3. Do not lift or tip the mower while it is running.

4. Notification of failure to use all required PPE during these operations will result in the immediate securing of the operation until appropriate PPE is used, as well as supervisory notification.

11004. SPECIFIC REQUIREMENTS FOR RIDING MOWERS

1. Personnel operating riding mowers, in a duty status, must possess a valid OF-346 to operate this type of equipment per MCO P11240.106 and TM 11275-1514.

2. Mowers will not be operated on hills or banks which have an unsafe slope angle as determined by the supervisor.

3. Operate riding mowers up and down slopes instead of sideways, Riding mowers will not be operated on soggy or slippery hills and banks.

4. Disengage the mower blade before crossing gravel driveways, walks, and dirt roads. For riding mowers that may not have the disengage capability, the mower's engine must be stopped before crossing gravel driveways, walks, or dirt roads.

5. Do not operate mowers without guards.

6. Keep hands, feet, and clothing away from drive chains and other moving parts.

7. Stop the engine when not in use.

8. Disengage all blades and drive clutches before starting the engine.

9. Operate mowers in a single file. Wear reflective vests when working near active roadways.

10. Tractors not equipped with roll over protection systems are not required to have safety belts installed. Operators of tractors equipped with ROPS are required to use safety belts.

11005. RESPONSIBILITIES

1. It is the responsibility of all mowing/trimming equipment operators and supervisors to comply with all safety rules.

2. Operators will be trained in the proper function of all equipment they operate and be provided with a copy of the appropriate SOPs on power lawn mowing, trimming, edging and leaf blowing operations. They are expected to read and understand the SOPs before operating any equipment. Written documentation of training for lawn mowing equipment operators will be maintained by the operator's supervisor.

3. Specifically, supervisors of lawn mowing/trimming operations will ensure lawn mowing equipment is marked with safety labels and maintained per applicable regulations and guidelines.

CHAPTER 12

RAILROAD RIGHT-OF-WAY SAFETY

CHAPTER 12

RAILROAD RIGHT-OF-WAY SAFETY

12000. POLICY. All personnel must be made aware of the extreme danger involved in trespassing onto the CSX (Old R,F, & P) Railroad right-of-way.

12001. BACKGROUND. In the past, military and civilian personnel have been struck, injured, or even killed by passing trains while traversing portions of the railroad right-of-way. There are gates and warning signals at road crossings and there are warning signs along the railroad right-of-way, intended to isolate the railroad from trespass by Base personnel. Railroading is heavy industry. Trains regularly pass through the Base at speeds in excess of 55 mph. This speed requires a great distance for trains to come to a complete stop. That means danger is present for Base personnel who choose to cross at unmarked crossings.

12002. INFORMATION

1. The area along the CSX Railroad tracks which passes through the boarders of the Base is the private property of the CSX-T Corporation. Base personnel, military or civilian, who trespass onto the right-of-way are subject to prosecution by the appropriate military or civilian authorities.

2. Normal passage of the at-grade, underpass or overpass crossings (Potomac Ave., Martin St., Henderson Rd., Range Rd., OCS Pedestrian overpass, and Fleming St.) are not considered trespassing.

3. Pedestrian or vehicle use of at-grade crossings while the bells are sounding, signal lights are flashing, and/or barricade gates are down, is a violation of federal law and an invitation to disaster.

4. Jogging, cycling, organized physical training, or troop maneuvers along the railroad right-of-way, is prohibited.

5. Walking across or fishing off of either of the railroad bridges, located over Quantico Creek or Chopawamsic Creek, is forbidden.

6. Placing objects upon the tracks, tampering with rail turnouts (commonly called switches), tampering or damaging train signal devices, defeating locking mechanisms on these devices, or otherwise damaging railroad equipment is a crime carrying the full weight of criminal and civil prosecution.

12003. RESPONSIBILITIES

1. Supervisors will convey to their personnel, military and civilian, the extreme danger and legal ramifications incident to trespassing onto the railroad right-of-way.

2. Military sponsors residing aboard MCB, Quantico, have the responsibility to educate their dependents regarding these dangers.

3. Anyone seeing any safety hazard along the CSX right-of-way that would endanger train movements, Base personnel, or property should contact Base Safety immediately.

CHAPTER 13

LASER SAFETY

CHAPTER 13

LASER SAFETY

13000. PURPOSE. To prescribe policy and guidance to identify and control laser radiation hazards. American National Standards Institute (ANSI) Standard Z136.1-1993, SECNAVINST 5100.14, and SPAWARINST 5100.12 establish guidelines for Marine Corps Laser Safety Programs.

13001. SCOPE. Actions required by this chapter apply to everyone on board MCB, Quantico for lasers: (a) designated for industrial applications, (b) designated for medical/dental applications, (c) designated for actual combat, (d) designated for combat training, or (e) classified in the interest of national security. All other lasers must comply with 21 CFR, Part 1040. Additionally, laser hazards associated with fiber optics must comply with ANSI Standard 2136.2 and medical lasers must comply with ANSI Standard 2136.3.

13002. BACKGROUND. The increasing prevalence of lasers in the medical, industrial, and military environments has heightened the probability of hazardous exposure from laser radiation. The Space and Naval Warfare Systems Command (SPAWAR 003) is the lead agency within DON and the Marine Corps for laser safety. Laser safety is a special concern and is a separate program from radiation safety.

13003. RESPONSIBILITIES

1. Director, Safety Division. The Director, Safety Division will designate a member of the Safety Division to be the MCB, Quantico Laser Safety Officer (LSO) and to be the POC.

a. The LSO will possess technical expertise, practical experience, and authority to approve or disapprove the use of lasers. The LSO will successfully complete a Laser System Safety Officer's (LSSO) course and fulfill the requirements outlined in enclosure (7) of SPAWARINST 5100.12 and be certified to qualify others as category II Safety Officers. Equivalent training may be approved by SPAWAR.

Responsibilities of the LSO include:

(1) Providing management oversight of the Laser Safety Program and ensure it per applicable regulations. Maintaining an inventory of lasers and their locations.

(2) Maintaining a list of personnel trained and certified to engage in laser operations and their specific functional limitations.

(3) Investigating laser radiation accidents and recommending corrective actions.

(4) Establishing and promulgating laser safety regulations.

(5) Submitting inventories, mishap reports, and other required information to SPAWAR (003), Marine Corps, and medical authorities.

(6) Coordinating with LSSOs to ensure proper operational input/prospective, accident investigations, corrective actions, regulations, and reports related to laser safety, operations, and training.

b. LSSOs. Activity heads, including tenant activities utilizing lasers, will appoint an individual LSSO for the organization. The LSSO will possess sufficient technical experience to establish SOPs to be submitted for approval by the MCB LSO. The LSSO may be an officer, SNCO, NCO, or civilian who will be designated by name with direct access to the CO. The LSSO must successfully complete an LSSO Course or equivalent training as approved by SPAWAR. The LSSO will have an understanding of lasers, laser hazards, and the necessary safety procedures required for safe operation of laser systems. The LSSO will be appointed by the activity head, in writing, with a copy to the MCB LSO and the Director, Safety Division (B 51).

2. AC/S G-3

a. AC/S G-3 will appoint an LSSO, preferably an individual in the Training Branch, G-3, in writing as the G-3 LSSO. A copy of the appointment letter will be forwarded to the MCB LSO and the Director, Safety Division (B 51).

b. The G-3 LSSO is responsible for the conduct of laser range operations per MCBO P1500.1. The G-3 LSSO will maintain a log of laser range firings for a minimum of 35 years.

3. Activities. Activities utilizing lasers or laser systems aboard MCB, Quantico will:

a. Ensure requirements for operation, maintenance, and training for laser hazard control are met as outlined in enclosure (8) of SPAWARINST 5100.12.

b. Establish a laser safety review system, coordinate the Laser Safety Inspection Program, publish laser SOPs, and present to the MCB LSO for approval.

c. Provide the MCB LSO a list of lasers and their locations, and a list of personnel trained and certified to engage in laser operations (and their specific functional limitations).

d. Establish and maintain laser record keeping procedures and records. Maintain training records and ensure required personnel are included in a medical surveillance program.

e. Submit annual inventories of Class IIIa, IIIb, IV, and military exempt lasers to the MCB LSO, (B 51), and the Chief, Fire Protection/Prevention Branch, Scty Bn (B 279).

f. Submit documentation concerning each military exempt laser product to the Laser Safety Review Board SPAWAR through the MCB LSO, with copy to the Director, Safety Division per SPAWARINST 5100.12. Military exempt lasers which have not been reviewed and approved safe for use will not be operated.

g. Ensure lasers and laser systems will be repaired by trained authorized personnel only. Class I and II lasers purchased from a manufacturer shall not be repaired by Command personnel but will be returned to the manufacturer or manufacturer's representative. No attempt will be made by unauthorized personnel to open the protective housing of Class I and II lasers.

h. Report excess lasers to the MCB LSO (B 51). Transfer excess lasers only after notification and approval of SPAWAR (003).

4. Health Care Advisor, Naval Medical Clinic, Occupational Health/Preventive Medicine Department. Establish and maintain a medical surveillance program per OPNAVINST 5100.23.

13004. REPORTS

1. Mishaps and incidents will be investigated and reported per MCO P5102.1. The MCB LSO and the Director, Safety Division will be notified by telephone, within 24 hours of laser mishaps and incidents.

2. Annual inventories will be completed by activities and submitted to the MCB LSO, the Director, Safety Division and the Chief, Fire Protection/Prevention Branch, Scty Bn by 15 August each year for Class IIIa, IIIb, IV, and military exempt lasers. Figure 13-1 is a sample format. The MCB LSO will submit an annual Command inventory to SPAWAR (003) by 30 August with a copy to the Chief, Fire Protection/Prevention Branch, Scty Bn.

3. Laser transfer/disposal requests will be made to SPAWAR by the MCB LSSO, with a copy to the Director, Safety Division and the Chief, Fire Protection/Prevention Branch, Scty Bn. Figure 13-2 is a sample format.

5100
(Originator Code)
(Date)

From: Commanding Officer,
To: MCB Laser Systems Safety Officer (B 51)

Subj: CLASS IIIA, IIB, AND IV EXEMPT LASER INVENTORY REPORT FOR FY-

Ref: (a) SPAWARINST 5100.12

1. Per the reference, the following annual report is submitted for FY-

a. Laser Type _____

b. Manufacturer _____

c. Contract Number _____

d. Number of Lasers _____

e. National Stock Number _____

f. Serial Numbers _____

g. Exempt Qualification (check applicable boxes)

Combat Training _____

Classified _____

2. Status

a. Number of LASERS:

In use ___ In storage Awaiting Disposition

b. Transferred within DoD to ___ Date ___ Approval date

Figure 13-1.--Laser Annual Inventory Report Format.

c. Disposed outside of DoD to ___ Date Approval _____

SIGNATURE

copy to:
Director, Safety Division (B 51)
Chief, Fire Protection/Prevention Branch (B 279)

Figure 13-1.--Laser Annual Inventory Report Format-Continued.

5100
(Originator code)
(Date)

From: Commanding Officer,
To: Commander, Space and Naval Warfare Systems Command SPAWAR (O9K)

Subj: REQUEST FOR TRANSFER/DISPOSAL OF EXEMPT LASER

1. It is requested that approval be granted to transfer/dispose (circle one) of the following exempt laser(s):

*Laser Type _____

Part Number _____

Serial No.(s) _____

National Stock Number (If assigned) _____

Exemption qualification

Combat _____ Training _____ Classified _____

To be transferred to _____

To be donated or sold _____

For Disposal:

Describe method of demilitarization and/or modification which is being accomplished to bring the laser in compliance with 21 CFR, part 1040 (1977) prior to disposal outside of DoD.

*Description should include laser medium and/or emitted wave lengths, maximum output of laser radiation, the pulse duration (when appropriate), and laser class.

SIGNATURE

copy to:
Director, Safety Division (B 51)
Chief, Fire Protection/Prevention Branch (B 279),
Public Safety Division

Figure 13-2.--Laser Transfer/Disposal Request Format.

CHAPTER 14

INDUSTRIAL HYGIENE/OCCUPATIONAL HEALTH

CHAPTER 14

INDUSTRIAL HYGIENE/OCCUPATIONAL HEALTH

14000. PURPOSE. To provide additional guidance for and in support of the Base Occupational Health (OH) Program.

14001. POLICY. The Naval Medical Clinic (NMCL) shall provide OH services to MCB, Quantico and all tenant activities per OPNAVINST 5100.23 series, the Bureau of Medicine and Surgery, and the current Interservice Support Agreement.

14002. BACKGROUND. OH is involved primarily in the prevention of unhealthful conditions that may result from long and short term/acute exposure to conditions in the work environment. The OH Program contains 2 elements, Industrial Hygiene (IH) and Occupational Medicine (OM).

1. IH comprises that portion of the OH Program involved with the anticipation, recognition, evaluation, and control of worker exposure to chemical, physical (i.e., noise, temperature extremes, etc.), and biological agents.

2. OM comprises medical surveillance that ensures a worker's fitness to perform assigned duties or that identifies the signs of damage resulting from workplace exposure or injuries.

14003. ACTION

1. COs/Division Directors/Activity Heads

a. Implement the OH Program described in this Manual and applicable regulations.

b. Monitor the scheduling and completion of medical surveillance/job certification examinations of all personnel.

c. Inform OH/IH Department, NMCL, whenever operations change that could potentially increase worker exposure.

d. Ensure personnel are scheduled for required training and monitor the completion of exposure related training for their staff.

e. Forward to individual workers the results of personal air and noise samplings mailed from NMCL.

f. Ensure that notice to contractors is provided whenever asbestos or lead is known to be present in affected buildings.

g. In order to limit worker exposure, comply with recommendations found in the IH survey, including the following when feasible:

(1) Replacement of hazardous materials with less hazardous materials.

(2) Implementation and maintenance of engineering controls.

(3) Modification of work or administrative practices affecting workforce safety and health.

(4) The supply of appropriate personal protective equipment (PPE) to workers needing it, and supporting its use with appropriate training and SOP.

h. Ensure laboratory operations are covered by a Chemical Hygiene Plan similar to the one at appendix B.

i. Treatment of on-the-job Injuries/Illnesses

(1) Ensure that their personnel report OH illness and cases of suspected illness due to occupational exposure as soon as possible to their supervisors.

(2) Ensure that supervisors of injured or occupationally ill civil service workers complete OPNAV Form 5100/9, Dispensary Permit. Form CA-l, Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation (and nonappropriated fund personnel complete the LS-1) shall be completed by the injured person and their supervisor for each injury or illness for documentation of possible worker's compensation claim. This form should accompany the injured worker to the NMCL as soon as possible and always within 2 working days of the injury or illness. Civilians with injuries should report to the OM Branch and active duty injuries to the Military Medicine Department (Sick Call).

2. co NMCL

a. Perform regular comprehensive IH surveys of MCB, Quantico and tenant activities, assessing exposure and evaluating program administration.

(1) Survey sites with recognized OH hazards annually; survey all other sites triennially.

(2) Provide survey reports to the appropriate survey site with copies to Base Safety and the Base Inspector.

b. Perform investigative site visits required to make any additional IH assessments.

c. Upon request, review plans for new and existing facilities to ensure compliance with OH standards.

d. Perform IH related air and bulk sampling relative to the exposure of government to all stressors.

e. Upon request provide exposure information to workers and their authorized representatives.

f. Provide other IH technical assistance as the branch determines to be necessary.

g. Provide OH related training as required.

h. Treatment of on-the-job injuries.

(1) Perform initial assessment and treatment of non-emergency, civilian worker injuries and illnesses arriving at the OM Branch within 2 working days of the injury.

(2) Perform initial assessment and treatment of active duty injuries in the Military Medicine Department (Sick Call).

3. Director, Safety Division. In conjunction with the CO NMCL, provide educational and informational materials on subjects/programs covered in this chapter.

4. NMCL, OH/IH Department. Monitor work place implementation of IH survey recommendations.

5. AC/S G-5

a. Coordinate with the OH/IH Department to ensure that engineering controls are designed per applicable standards, and functions so as to limit worker exposure to levels established in references,

b. Ensure contracts for asbestos and lead abatement are reviewed by the IH Department, NMCL before execution.

c. Ensure the Head, Public Works Branch, G-5 monitors contracts/contractors for compliance with Occupational Safety and Health Standards.

d. Ensure that required permits are obtained from the State of VA prior to initiating in-house asbestos abatement. Coordinate all asbestos issues/projects with the Base Safety Division, per MCBO 6260.3.

6. Individual Workers

a. Use engineering controls (i.e., ventilation) when available in the workplace as recommended in activity IH survey reports.

b. Understand and follow recommended safety and health standards.

c. Wear personal respiratory protection, hearing protection, impermeable gloves and other PPE as recommended by activity IH survey reports.

d. Report to the NMCL for audiometric, medical surveillance, job certification, or other examinations scheduled.

e. Report for OH training as directed by your supervisor.

f. Report on-the-job injuries and cases of suspected illness due to occupational exposure as soon as possible to supervisors, and report to NMCL for evaluation and treatment.

14004. PROGRAM ELEMENTS

1. Noise and Hearing Conservation Program (HCP). One of the most common OH illnesses is noise-induced hearing loss. The louder the noise, the longer the noise, and the more years of exposure, the greater the likelihood of hearing loss. Fortunately, hearing loss is easily preventable by regular and proper use of appropriate hearing protection. For personnel routinely exposed to high noise levels, regular audiometric examination is required in order to detect the early signs of hearing loss. Additional requirements related to this program are found in MCBO 6260.2.

a. An assessment of personal noise exposure levels will be made as part of periodic IH surveys.

b. Areas and equipment producing noise in excess of levels allowed in MCO 6260.2 will be labeled as "noise hazardous" with (8 x 10 ½) NAVMED Form 6260 (NSN 0105-LF-206-2605) or (1" x ½") NAVMED Form 6260/A (NSN 0105-LF-212-6020).

c. All personnel working in noise hazardous areas or with noise hazardous equipment, even for short periods, will wear approved hearing protection.

(1) It is critical that hearing protection be adequate with respect to noise and that the protection be maintained. Hearing protection should be kept clean. Damaged equipment is useless and must be replaced.

(2) All hearing protection wears out with normal use and must be replaced regularly. Foam plugs should be replaced after 8 to 16 hours of use and muffs after a year of use, or when visibly damaged or defective.

(3) Hearing protection is to be provided and funded by the command or activity of personnel requiring it.

d. Personnel routinely exposed to noise levels in excess of those allowed by MCO 6260.1 will be included in the HCP and be required to receive baseline and annual audiometric examinations. Inclusion in the program will be based upon the most recent IH survey results and related sampling, as recommended in the survey reports. In order to ensure routine and efficient performance of examinations, activities should have their personnel report for examination during their birth month. Information regarding scheduling of audiometric examinations is available at the NMCL, OH Department at 703-784-1673.

e. All personnel in the HCP are required to receive annual training. Training is being provided by the IH Branch, NMCL.

2. Respiratory Protection Program (RPP). Respiratory protection is to be worn by personnel potentially exposed to chemical and metal dust, mists, fumes, vapors, and gases, in excess of allowable levels, or when required by law or regulation. The RPP is administered by the Respiratory Protection Program Manager (RPPM), per MCBO 6260.1.

a. An assessment of potential exposure will be made as part of periodic industrial hygiene surveys. Personnel judged during the course of the survey to be potentially exposed to chemical agents in

excess of levels allowed in the currently applicable regulations are required to wear approved respiratory protection. Commanders and directors of workplaces requiring respiratory protection will be notified by NMCL.

b. Personnel in the RPP will receive an annual medical examination to certify their ability to safely wear the respiratory protection provided.

c. Personnel in the RPP will receive annual (semiannual in the case of asbestos and lead) fit-testing and training in the use of the respirator.

d. Personnel having beards or other facial hair that could interfere with the formation of a face-to-face piece seal will not be fit-tested and will not be permitted to wear tight-fitting respirators.

e. Activities will provide and fund required respiratory protection for their workers required to wear it.

f. Activity respirator use must be accompanied by the following:

(1) Respirator cleaning and disinfection after use, and periodically as needed, must be part of a regular routine.

(2) Respirators must be stored in a convenient, clean, and sanitary place.

(3) Respirators are to be inspected during cleaning, and worn or deteriorated parts replaced as necessary.

(4) Implementation of an SOP governing the selection and use of respirators is required.

3. Asbestos Exposure Control. Inhalation of asbestos fibers over a period of years may lead to irreversible lung disease and death. Asbestos is found in many forms in buildings aboard Quantico. Unless disturbed in such a way as to allow fibers to become airborne, such as through sanding, grinding, cutting, and ripping out/tearing out the asbestos-containing material (ACM), exposure above permissible levels should not occur. Removal or disturbance of ACM is limited to trained personnel and shall be accomplished per applicable Federal, State, and local regulations. Safety Division, in cooperation with G-5, will provide guidance for asbestos abatement.

a. Supervisors, planners, and contract personnel are responsible for knowing asbestos requirements relating to their work crews and personnel. The Base Asbestos Program Manager (APM) can provide technical assistance at 703-784-2866.

b. Results from sampling performed during operations aboard the Base shall be maintained by the APM.

4. Lead Exposure Control. Inhalation and ingestion of inorganic lead dust and fumes have been health hazards for at least 2 thousand years and have been recognized as such in industrial applications since the late 1960's. Occupational and environmental controls during recent years have resulted in major reductions in lead exposure throughout the United States. However, lead exposure remains an area of concern for our work force.

a. Operations aboard MCB, Quantico in which personnel may be exposed to lead include the following:

(1) Weapons firing, weapons cleaning, and range and trap cleaning.

(2) Breaching training using lead-encased flex linear charge.

(3) Performing hot work such as welding, cutting, brazing, and soldering on lead-containing or coated materials.

(4) Application and removal of lead-containing paintings or coatings.

b. Air sampling for lead or asbestos aboard the base may be performed by the IH Department, NMCL.

c. Personnel routinely overexposed to lead will receive medical surveillance examinations per 29 CFR 1910.1025 or 1926.62, whichever is applicable.

d. Personnel potentially overexposed to lead will receive annual education and training, which will be provided by the IH Department, NMCL by contacting the IH Department at 703-784-1674/1675.

e. Lead is also a hazard by ingestion. Personnel working around lead dust must always wash their hands before eating, drinking, smoking, or applying cosmetics, after lead-related duties to prevent accidental ingestion of the chemical.

5. Heat Stress Exposure Control. Heat associated injury and illness results primarily from the combination of environmental temperature, humidity, exposure duration and solar contact (if outdoors), and the amount of heat generated by the body.

a. The principal threat of heat injury is to military personnel during physical training or performing strenuous exercise. Details of the base program relating to these activities are described in MCBO 6200.1.

b. In general, office environmental conditions, even without air conditioning, will not create health problems for normal, healthy personnel performing sedentary office jobs. For personnel working in industrial or office settings, physiological heat exposure limits will be used to determine what limitations, if any, must be put on worker exposure to heat.

c. When situations not covered in that Order are encountered, the IH Department of the NMCL should be contacted. On the basis of conditions described or site visit, recommendations to reduce threat of heat injury will be made.

6. Biohazards Exposure Control. The opportunity for exposure to recognized biohazards is relatively limited aboard MCB, Quantico. The following are examples of common biohazards:

a. Bloodborne Pathogens. The Hepatitis B Virus and Human Immuno-deficiency Virus found in blood and certain other body fluids pose a potential hazard to all personnel.

(1) It is anticipated that certain personnel may come in contact with blood or other potentially infectious fluid in the course of their assigned duties. These people are required to receive immunization and training within the scope of the Base Exposure Control Plan contained in appendix C.

(2) In unusual situations, personnel aboard MCB, Quantico could encounter blood or other contaminated material in the work-place. If this happens, the following precautions should be taken:

(a) Blood or contaminated material should be assumed to be infectious and avoided.

(b) If potential contact with material is necessary, personnel assigned to clean must exercise precautions as described in paragraph 5 of the Exposure Control Plan.

(c) If contact was believed to have occurred, a medical evaluation per paragraph 4 of the Exposure Plan should be obtained.

b. Lyme Disease. The rickettsia that carries Lyme Disease is present in several varieties of ticks living in the areas around Quantico. Personnel working in forests or overgrown areas should inspect themselves for ticks. If ticks are discovered after attachment (i.e., with head buried in skin) during work, the worker is to immediately report to NMCL for medical evaluation. If ticks are discovered after the attachment, after duty hours, the worker should seek immediate medical attention and report the incident to the OH nurse at NMCL the following workday.

7. Indoor Air Quality. Requests for evaluation of Indoor Air Quality conditions are to be forwarded using the MCB Form 5100/11 (EF), IH Service Request form (appendix D).

14005. INDUSTRIAL HYGIENE SERVICE REQUEST

1. Most IH activities are programmed on 1, 2, or 4 year cycles depending on conditions observed in workplaces.

2. If other site visits, surveys, or services are desired, activities should complete MCB Form 5100/11 (EF) (appendix D) to obtain it most efficiently.

CHAPTER 15

AMMUNITION AND EXPLOSIVES SAFETY

CHAPTER 15

AMMUNITION AND EXPLOSIVES SAFETY

15000. PURPOSE. To provide information and references regarding conventional ammunition, ammunition components, explosives, and handling, storage, shipment, maintenance and disposal of these materials at MCB, Quantico.

15001. BACKGROUND. The explosives safety policies of the Marine Corps are directed at providing high quality ammunition in sufficient quantity to satisfy Marine Corps requirements in a safe manner. These policies emphasize safe and efficient operating procedures while maximizing the protection of valuable physical resources, and minimizing exposure of personnel to the hazards of ammunition and explosives.

15002. INFORMATION. Safety regulations are intended to control the hazards associated with handling, storage, shipping, receiving, maintenance, and disposition of ammunition and explosive materials. However, it is difficult to cover every possible emergency. Therefore, personnel carrying out these instructions shall understand the principles on which they are based, so that appropriate action is taken under circumstances not specifically covered. The ammunition and explosives safety standards that are contained in DoD directives, NAVSEA Operating Procedures, and applicable MCOs and MCBOs are to be considered the minimum. The greatest protection shall be provided when possible.

15003. RESPONSIBILITIES

1. Installation CG. The CG is responsible for the safety of MCB, Quantico. He shall designate, in writing, an Explosives Safety Officer (ESO) within the Safety Division and require personnel of other agencies, including contractors, while on the facility under his command, to conduct their activities per established safety rules.

2. Safety Division. The Safety Division is to administer the Explosives Safety Program.

a. Director, Safety Division. The Director, Safety Division, is a special staff member to the CG for safety matters.

b. ESO. The ESO shall manage the Base Explosives Safety Program and provide reasoned, informed advice and Explosives Safety Representative Training to the Base and tenant activities regarding compliance with safety standards and acceptable levels of risk with regard to explosive operations.

c. Driver's Training Section. The Driver's Training section shall provide training and licensing per MCBO 11240.2 for explosives drivers. The ESO will participate in said training.

3. AC/S G-3. The AC/S G-3 shall provide operational support as directed in MCBO P1500.1.

4. Public Affairs Officer (PAO). When requested, in writing, by the base ESO, the PAO, shall periodically use local news media to warn the nearby communities of the hazards in trespassing on range areas and handling of live ammunition. Specific information and guidance will be provided by the ESO.

5. Supervisory Personnel. Supervisors that are responsible for the handling, storage, and/or transportation of ammunition shall be thoroughly familiar with the provisions of NAVSEA OP 5, Vol. 1, and other ordnance related publications, Supervisors have no authority to neither waive or alter safety regulations nor permit violation of regulations. They shall act positively to eliminate any potential accident/hazard that exists in operations under their jurisdiction. Each supervisor shall be responsible for the following:

a. Explain to all workers under their immediate supervision the standard safety regulations, industrial hygiene safeguards, and precautions that they shall follow and enforce. Explain the characteristics of the ammunition, explosives, or other hazardous materials involved as well as the selection, use, and care of the necessary tools, materials, protective equipment and handling equipment. Explain the hazards of fire, explosion, and other catastrophes that the safety regulations and industrial hygiene requirements are intended to eliminate or reduce.

b. Instruct and train each worker under their immediate supervision in the work that the worker shall perform, whether the instruction is given directly or through an experienced operator, performing the work safely. This instruction shall include complete information concerning magazine location, identification, and the location and use of shelters and bomb proofs, first-aid kits,

firefighting apparatus, guards, personal protective equipment (PPE), showers, plunges, and neutralizing solutions.

c. Ensure all personnel are qualified and certified to perform the job assigned to them and that their certification is current. Report promptly to their immediate supervisor all workers, who in their opinion, are not qualified for their assigned work. This includes any worker who is suspected or known to be colorblind and is engaged in operations that involve the storage of ammunition and explosives.

d. Investigate or assist in the investigation of all accidents involving operations, equipment, or personnel under their supervision and report or assist in the preparation of the report on the investigation's results for its submission to higher authority.

e. Permit the use of only those tools and handling equipment that are authorized for the operations and used in the manner specified by standard operating procedures. Select handling equipment that complies with NAVSEA SWO23-AG-WHM-010 and NAVSEA OP 2173. Require that tools and handling equipment are properly stored in designated locations when not in use. When a tool is lost or misplaced in an operating area 'or magazine, stop all operations until the tool is found.

f. Enforce compliance with safety regulations governing the use of PPE. Ensure that all PPE is inspected, maintained, or replaced as necessary.

g. Report, in writing, to the CO any requests, suggestions, or comments concerning safety standards.

h. Alert the next level of supervision of the need for EOD personnel to remove defective or suspect ammunition from the work area.

i. Ensure all personnel tasked to transport explosives, ammunitions, etc., are certified vehicle operators and properly licensed.

6. Operating Personnel. Operating personnel are responsible for reading, understanding and strictly observing all safety standards, requirements, and precautions applicable to their work or duty. In addition, each individual shall:

a. Immediately report to the supervisor any unsafe condition, worker actions, or equipment or material that he considers unsafe.

b. Immediately warn other personnel when they are in danger of known hazards or are placing themselves in danger by their failure to observe safety precautions.

c. Wear or use approved protective clothing or equipment as required.

d. Immediately report to the supervisor any injury or evidence of impaired health, to themselves or others, occurring in the course of work or duty.

e. Be prepared, in the event of an unforeseen hazardous occurrence, to give an audible warning to the other workers and to exercise reasonable caution appropriate to the situation.

f. Immediately report to the supervisor the presence of unauthorized personnel in the area.

7. Explosives Drivers

a. All drivers transporting ammunition and explosives must be certified. The training, qualifying, examining, and licensing of explosive drivers will be per NAVSEA OP 5 Vol. I, NAVSEA SWO20-AF-ABK-010, and MCBO 11240.3. Training and licensing drivers is the responsibility of the Head, Drivers Training Branch, Safety Division.

b. It is the duty of each driver assigned to transport ammunition and explosives, to follow all instructions in NAVSEA SWO20-AF-ABK-010. In addition, drivers are required to have a copy of chapters 5, 9, and appendix E of the NAVSEA SWO20-AF-ABK-010 (Glove Box Edition) in their possession while transporting ammunition or explosives.

c. The driver shall be responsible for the safe and efficient transportation of the shipment of ammunition, explosives, or other dangerous articles, except in operations where relieved of the responsibility by the officer or noncommissioned officer in charge of the operation.

d. The driver shall inspect the vehicle at least once each day and always just prior to loading cargo. The results of this inspection shall be reported on NAVMC Form 10627 (EF), Vehicle and Equipment Operational Record (Administrative and Tactical Motor Vehicles). The driver shall have the right to refuse any vehicle when, in the driver's opinion, the vehicle or load is in an unsafe condition.

e. When vehicles transporting ammunition or explosives reach their destination after travel over public highways, the destination side of the DD Form 626 (EG), figure 15-1, must be completed. Only items 1, 8, 10, 11, 12, 17, 19, and 22 shall be checked at the receiving point. The provisions of this paragraph may be waived when all travel has been within the confines of this Base.

8. Material Handling Equipment Operators. Only qualified personnel, properly trained and licensed, shall operate industrial materials handling equipment. Personnel shall be qualified and certified under the provisions of NAVSEA SWO23-AH-WHM-010 and appropriate command directives.

15004. GENERAL REQUIREMENTS

1. Reporting Hazardous Conditions. All hazardous conditions or unsafe acts in or around magazines, operating buildings, or explosives areas shall be immediately corrected, if possible, and promptly reported by workers to their immediate supervisor. The supervisor shall act positively to eliminate and prevent the recurrence of the potential hazards/unsafe acts.

2. Safety Training. All personnel engaged in operations that involve ammunition, explosives, and other hazardous materials shall be trained and qualified to perform their assigned duties. Employees shall be trained under the direct supervision of supervisors or experienced workers until they are competent to safely perform assigned work. All training shall be documented in the individual's training records.

3. Physical and Mental Fitness. All personnel engaged in handling explosives or explosives devices or who operate motor vehicles or power-operated handling equipment shall be given physical examinations per the requirements of NAVSEA OP 5, Vol 1.

4. SOPS. Activities shall conduct ordnance processes in the safest manner possible. Each process shall comply with the technical requirements, explosive safety standards, personnel qualification and certification requirements, Occupational Safety and Health standards, Federal, state, and local regulations. The SOPs are the required documents by which Marine Corps activities shall develop written procedures prior to starting any operation involving ammunition or explosives. No process involving explosives will take place without approved, documented procedures. NAVSEAINST 8023.11 (series)

provides the standard for writing SOPs and MCBO 8023.3 provides additional guidance and direction. All explosives/ammunitions SOPs will be coordinated through the Base Safety Division for ESO review prior to publication.

5. Inert-Loaded, Dummy, and Drill Ammunition. Only inert ammunition shall be permitted for drill or training purposes, displays (public or otherwise), demonstrations, public functions, or patriotic occasions as authorized. All activities shall ensure that all inert-load or empty ammunition and their components, are inspected and certified to be "inert ordnance" and properly labeled as such.

6. Ranges, Training Areas, and Special Facilities. MCB, Quantico encompasses approximately 66,000 **acres** of training areas. The ranges aboard Base provide the facilities to conduct realistic, beneficial training within the parameters of common sense and pertinent safety measures. To promote the maximum possible use of ranges and related training facilities, the following criteria must be strictly complied with:

a. All live fire evolutions must be conducted per MCBO P1500.1, MCO P3570.1, all applicable FMs and TMs, and unit or command safety SOPS.

b. All live fire must be conducted safely, observing all range control measures (i.e., limit markers, limits of advance, azimuths of fire changes, surveyed firing positions, etc.) as delineated in MCBO ~1500.1 and Range Safety Cards issued by Range Control.

c. All activities training aboard MCB, Quantico shall submit an individual unit request to the Director, G-3 for the area, range, or special facilities desired per the instruction in MCBO P1500.1.

d. Training activity involving air or water space, training areas, or live firing not published in the weekly Training Area and Range Schedule is strictly prohibited.

7. Privately Owned Weapons, Ammunition, and Explosives. All personnel owning weapons, ammunition and explosives, shall comply with the provisions of MCBO 8000.1. Individuals residing aboard the Base shall register all firearms, bows, crossbows, BB and pellet guns with the Provost Marshal (Vehicle Registration Office), per MCBO 8000.1.

8. Radio/Radar Transmissions. Many transmitting devices produce electromagnetic radiation which can cause premature ignition of an electro-explosive device contained in ordnance systems. This

radiation can also cause biological injury to personnel. In order to permit maximum use of electromagnetic equipment while ensuring the safety of Marine Corps personnel, it is imperative that a fully coordinated program be maintained to eliminate unnecessary existing electromagnetic radiation and monitor its effect. All activities shall:

a. Comply with emission control procedures as described in NAVSEA OP 3565, and the Hazards of Electromagnetic Radiation to Ordnance Assessment of the MCB.

b. Clearly mark, with warning signs, all radio and radar transmission sites or sources, to protect personnel and ordnance from overexposure.

c. Protect personnel as well as fuel and other flammable liquids from ground and aircraft radio and radar frequency fields as required by NAVSEA OP 3565.

9. New Construction. Construction features and locations are important safety considerations in planning ammunition and explosives facilities or facilities that are exposed to the damaging effects of potential explosions. Proper location of exposed sites reduces the risk of unacceptable damage and injuries in the event of an accident. Applicable safety and health specifications and features shall be incorporated into proposed new construction and rehabilitation of existing structures. Design plans, blueprints, and specifications will be forwarded to Base Safety Division for review by the ESO, to ensure the siting of the construction meets the requirements of NAVSEA OP 5 Vol. 1, for proper site approval.

10. Maintenance in Explosives Areas. All work requiring heat or spark producing equipment that develop temperatures higher than 288 degrees Fahrenheit shall not be performed in an explosives area without proper and continuous supervision and a signed permit issued by the Base Fire Station and Base ESO.

11. Identification of Display Boards, Exhibits, Models, Souvenirs, and Mementos. All items in display boards; exhibits, models, souvenirs and mementos shall be inspected by EOD to ensure the complete removal of all explosives material and properly identified by serial number, The location of all display boards, exhibits, models, souvenirs and mementos shall be reported to Safety Division, Base ESO.

15005. EXPLOSIVES SITE APPROVALS (ESA)

1. ESAs are a specialized site approval, a *license to operate,* required when an organization is using or storing ammunition and/or explosives. The location of activities/facilities and operations are important safety and environmental considerations when planning where, when and how ordnance is used. Operations using, storing or handling explosives shall be undertaken only in those areas or locations that are specifically approved for that purpose according to governing DoD, DON, and Marine Corps directives. All facilities or locations where ammunition and explosives are stored, or where explosives are used (Operating Locations), to include detonation sites and explosives demonstrations conducted on ranges, require special "explosives safety site approval" from the DoD Explosives Safety Board (ESB) and/or the Navy Ordnance Safety and Security Activity (NOSSA); formally Navy Ordnance.

2. Objective. This chapter is intended to develop a local process designed to identify facilities/operations requiring ESA, process ESA requests IAW governing directives, and staff each ESA through the installation chain of command to appropriate approval levels.

3. Processing ESA Requests Aboard MCB, Quantico

a. All Organizations/Agencies wishing to modify a facility or facilities with an existing DoD ESB/NOSSA explosives safety site approval, to include training ranges, or to utilize a facility which has not been approved for such activity must:

(1) Submit a written ESA request to the installation ESO, B 51A. The ESO will review the request to ensure the request contains the following minimum information:

(a) A brief summary of the scope of operation or facility to be constructed or modified.

(b) Description of hazardous materials or items to be stored or used in the new or modified facilities; i.e., rockets, artillery ammunition or other items.

(c) Nomenclature, DODIC/NALC (if known), quantities, class(es) and division(s) of ammunition, explosives or other hazardous materials proposed for the new or modified facility, including a breakdown by room or bay when appropriate.

(d) ID of all facilities, adjacent to the facility to be constructed or modified, describing their use, occupancy, and hazardous materials content.

(e) Anticipated personnel limits for the new or modified facility, including a breakdown by room or bay when appropriate.

(f) Other information as may be required.

b. The ESO will provide guidance related to required items/ information to the submitting organization(s) and the AC/S G-5 in order to ensure a complete request package is prepared. The ESO will then forward the ESA request(s) to AC/S G-5 for final preparation and completion of site planning documents, appropriate maps, and internal coordination through Public Works Branch (PWB), Facility Maintenance Branch (FMB), and Natural Resources and Environmental Affairs (NREA) (all critical to this process).

c. AC/S G-5 will ensure the following internal actions to prepare, finalize and staff the site approval request package:

(1) PWB, G-5

(a) Consolidate all responses for internal review.

(b) Prepare design plans and specifications for requested projects.

(c) Prepare or request site development maps for project.

(d) Prepare NAVFAC 11010.44 to be sent to Higher Headquarters.

(2) NREA Branch, G-5

(a) Provide environmental assessment per National Environmental Policy Act (NEPA).

(b) Provide environmental recommendations for project.

(c) Present project to the Environmental Impact Review Board and provide approval.

(3) FMB, G-5. Review all design plans and specifications for proposed projects/maintenance and provide appropriate comments.

d. AC/S G-5, PWB will consolidate all information (NAVFAC 11010/31, Maps, etc.) into a draft explosives site approval request package and staff the package to the Safety Division for final review prior to staff coordination by the ESO.

e. The installation Safety Division will review and staff the package through the following organizations:

(1) Communications Electronics Division, G-6, to review plans and provide assessment for Hazards of Electromagnetic Radiation to Ordnance (HERO).

(2) Scty Bn/Fire Department, to review plans to ensure the design meets current physical securities requirements and provide recommendations. To review plans to ensure design meets current fire safety requirements and provide recommendations.

(3) Comptroller Division, to prepare an Interservice Support Agreement or MOU/MOA as may be required.

f. When all staff review is complete, the Base ESO will prepare a cover letter, with the final package, requesting site approval addressed to DoD ESB via appropriate chain of command as indicated below. The ESO will then staff letter/package through the Safety Director and the CG's Counsel for the Base C/S's signature. Once signed, the AC/S G-5, PWB will provide 7 copies to the ESO for appropriate distribution per NAVOP 5.

To: Department of Defense Explosives Safety Board
Room 856-C, Hoffman Bldg 1
2461 Eisenhower Avenue
Alexandria, VA 22331-0600

Via: (1) Commander, Marine Corps System Command, PMAM-EES
2033 Barnett Avenue, Suite 315
Quantico, VA 22134-5010

(2) Commandant of the Marine Corps (LFL)
Headquarters, U.S. Marine Corps
2 Navy Annex
Washington, DC 20380

(3) Commander, Naval Ordnance Safety and Security Activity
(N711), Farraut Hall, 323 Strause Avenue
Indian Head, MD 20641-5555

4. All organizations, agencies, or individuals wishing to conduct activities involving the use of explosives material, including fire works, at any MCB, Quantico location shall:

a. Submit a written request to AC/S G-3 for authorization and assignment to an approved location.

b. Provide the following minimal required information in each request:

(1) A brief summary of the scope of the activity to be conducted.

(2) Dates and times of activity.

(3) Preferred location for activity (if known).

(4) Description of items to be used.

(5) Other information as may be required.

c. AC/S G-3, upon receiving a request to use a facility/range shall coordinate/staff the request through the Base activities indicated below. After receiving and assessing comments from staff, assign request(s) to an approved location.

(1) AC/S G-5 (B 04)

(2) AC/S G-4 (B 21)

(3) AC/S G-6 (B 50)

(4) Dir, Comptroller Division (B 18)

(5) Dir, Safety Division (B 51)

(6) CO Scty Bn (B 27)

(7) Counsel (C 050)

MOTOR VEHICLE INSPECTION (TRANSPORTING HAZARDOUS MATERIALS)

(Read Instructions before completing this form.)

This form applies to all vehicles which must be marked or placarded in accordance with Title 49 CFR.

1. GOVERNMENT BILL OF LADING/TRANSPORTATION CONTROL NUMBER

SECTION 1 - DOCUMENTATION	ORIGIN a.	DESTINATION b.
2. CARRIER/GOVERNMENT ORGANIZATION		
3. DATE/TIME OF INSPECTION		
4. LOCATION OF INSPECTION		
5. OPERATOR(S) NAME(S)		
6. OPERATOR(S) LICENSE NUMBERIS)		
7: MEDICAL EXAMINERS CERTIFICATE*		

6. *(X if satisfactory at origin)*

a. MILITARY HAZMAT ENDORSEMENT		d. ERG OR EQUIVALENT COMMERCIAL:		YES		NO		9 CVSA DECAL DISPLAYED ON COMMERCIAL EQUIPMENT*	YES	NO
b. VALID LEASE--		e. DRIVER'S VEHICLE INSPECTION REPORT*						a. TRUCK/TRACTOR		
c. ROUTE PLAN		f. COPY OF 49 CFR PART 397						b. TRAILER		

SECTION II - MECHANICAL INSPECTION

Al items shall be checked on empty equipment prior to loading. Items with an asterisk shall be checked on all incoming loaded equipment.

10. TYPE OF VEHICLE(S)

11. VEHICLE NUMBER(S)

12. PART INSPECTED *(X as applicable)*	ORIGIN (1) SAT	ORIGIN (1) UNSAT	DESTINATION (2) SAT	DESTINATION (2) UNSAT		ORIGIN (1) SAT	ORIGIN (1) UNSAT	DESTINATION (2) SAT	DESTINATION (2) UNSAT	COMMENTS (3)
a. SPARE ELECTRICAL FUSES					k. EXHAUST SYSTEM*					
b. HORN OPERATIVE					l. BRAKE SYSTEM*					
c. STEERING SYSTEM					m. SUSPENSION					
d. WINDSHIELD/WIPERS					n. COUPLING DEVICES					
e. MIRRORS					o. CARGO SPACE					
f. WARNING EQUIPMENT					p. LANDING GEAR					
g. FIRE EXTINGUISHER*					q. TIRES, WHEELS, RIMS					
h. ELECTRICAL WIRING					r. TAILGATE/DOOR					
i. LIGHTS AND REFLECTORS					s. TARPAULIN*					
j. FUEL SYSTEM*					t. OTHER *(Specify)*					

13. INSPECTION RESULTS *(X one)* ACCEPTED REJECTED

(If rejected give reason under "Remarks". Equipment will be approved if deficiencies are corrected prior to loading.)

14. SATELLITE MOTOR SURVEILLANCE SYSTEM: *(X one)* ACCEPTED REJECTED

15. REMARKS

16. INSPECTOR SIGNATURE *(Origin)*

17. INSPECTOR SIGNATURE *(Destination)*

SECTION III - POST LOADING INSPECTION

This section applies to Commercial and Government/Military vehicles. All items will be checked prior to release of loaded equipment and shall be checked on all incoming loaded equipment.

	ORIGIN (1) SAT	ORIGIN (1) UNSAT	DESTINATION (2) SAT	DESTINATION (2) UNSAT	COMMENTS (3)
18. LOADED IAW APPLICABLE SEGREGATION/COMPATIBILITY TABLE OF 49 CFR					
19. LOAD PROPERLY SECURED TO PREVENT MOVEMENT					
20. SEALS APPLIED TO CLOSED VEHICLE; TARPAULIN APPLIED ON OPEN EQUIPMENT					
21. PROPER PLACARDS APPLIED					
22. SHIPPING PAPERS/DD FORM 836 FOR GOVERNMENT VEHICLE SHIPMENTS					
23. COPY OF DD FORM 626 FOR DRIVER					
24. SHIPPED UNDER DOT EXEMPTION 868					

25. INSPECTOR SIGNATURE *(Origin)*

26. DRIVER(S) SIGNATURE *(Origin)*

27. INSPECTOR SIGNATURE *(Destination)*

28. DRIVER(S) SIGNATURE *(Destination)*

DD FORM 626, SEP 1998 (EG) PREVIOUS EDITION IS OBSOLETE.

FIGURE 15-1.--DD FORM 626 (EG) MOTOR VEHICLE INSPECTION.

CHAPTER 16

TRAFFIC SAFETY

CHAPTER 16

TRAFFIC SAFETY

16000. PROGRAM. DoDInst 6055.4, MCO 5100.19, and MCBO 11240.2 direct the implementation of a Base Traffic Safety Program. This Program consists of programs and processes related to safe driving, pedestrians, licensing, drivers training, and other areas necessary to ensure a safer driving environment aboard MCB, Quantico.

16001. BACKGROUND

1. Motor vehicle mishaps are the leading category of accidental death and injury to Marines. These mishaps impact on the individual, the unit/command, their families, and consequently the Marine Corps, costing millions of dollars every year. Traffic mishaps are preventable. Self-discipline, training, and enforcement are instrumental in preventing them.

2. The objective of this program is to improve driver attitudes, habits, skills, and behavior in order to reduce vehicle mishaps and the resultant injury, death, and property damage, according to guidance set forth in DoD and Marine Corps standards.

3. Vehicle operator errors, violations, and attitudes are principal contributors to vehicle mishaps. The Vehicle Driver's Education Program mandated by MCO 5100.19 provides a means to inform personnel of driving responsibilities.

16002. REQUIREMENTS

1. The Base Safe Drive Council and its Ad Hoc Committee are designed to resolve traffic safety issues related to reducing vehicle related mishaps. Details of the council and committee are in chapter 1 of this Manual.

2. Driver's licensing and government motor vehicle training are addressed in MCBO 11240.2.

3. Cell Phone Usage in Vehicles Aboard MCB, Quantico

a. Government Vehicles (GOV)

(1) Operators of GOVs may not operate a cell phone at any time while they are driving a GOV vehicle at any time while the

vehicle is moving or on roadways. Additionally, operators of GOVs may not operate a cell phone at any time while entering or while transiting military police checkpoints, force protection barrier systems, or while at any of the base entry gates. They may use a cell phone if at a complete stop and fully off the road (or parked) for emergency purposes or other safety purposes. Operators of GOVs may be cited for reckless driving if using a cell phone at MP checkpoints, force protection barrier systems or at any of the entry gates to the base.

(2) Passengers, however, may operate a cell phone while riding in a government vehicle as long as they do not interfere with the safe operation of the vehicle.

b. Privately Owned Vehicles (POV)

(1) Operators of POVs may not operate a cell phone at any time while entering or while transiting military police checkpoint zones, force protection barrier system zones, or while at any of the base entry gates. Operators of POVs may use a cell phone on other roadways aboard the Base, however, it is generally considered a poor safety practice. Operators of POVs may be cited for reckless driving if using a cell phone at MP checkpoints, force protection barrier systems or at any of the entry gates to the Base.

(2) Passengers, however, may operate a cell phone while riding in a POV as long as they do not interfere with the safe operation of the vehicle.

4. Bicyclists will ride with the flow of traffic when riding on Base roads. American National Standards Institute (ANSI) or Snell Memorial Foundation bicycle helmets shall be worn by all persons (including dependents) riding bicycles on MCB, Quantico **as** required in DoDInst 6055.1 (NOTAL).

5. Jogging. When jogging on roadways, joggers are required to wear light colored clothing and a reflective vest from 1/2 hour before dusk until one-half hour after sunrise. Head phones shall not be worn while jogging or walking on Base roadways or streets. All pedestrians, whether running, jogging, or walking, shall be on the left shoulder of the roadway, facing traffic, at least 3 feet off the traveled roadway. Never run more than two abreast. Refer to MCBO 5560.2 for information related to formation running/movement of troops in formation.

16003. TRAINING

1. Driver Improvement Training. All permanently assigned military personnel under the age of 26 will complete the 8-hour Driver Improvement Course (DIC) within 30 days of the day they report for duty to this Base. The following personnel are exempt:

a. Officer students attending TBS. (TBS students will attend DIC prior to graduation).

b. Military personnel attending MOS producing schools.

c. Military personnel under the age of 26 who have a statement of completion on page 11 of their SRB/OQR, or a certificate of class completion from another MCB, or entry in the unit diary attesting to the date and location of DIC completion.

2. Motorcycle Safety Training. No person shall operate motorcycles, motor bikes, motor scooters, or mopeds aboard MCB, Quantico before first completing the Motorcycle Safety Foundation Experienced Riders Course, as required by MCO 5100.19. Proof of completion of this course is required for the registration of any of the above equipment at Provost Marshal Office.

3. Remedial Driver Training. This class 'is conducted to provide additional training to those individuals with traffic violations or as directed by their commanders. The Traffic Court Officer and/or commanders review each case of **a** moving violation and/or traffic mishap. Designated individuals will participate in a Remedial Driver Training Program when considered appropriate.

4. All regularly scheduled driver training will be conducted by the Driver Licensing and Training Branch, Safety Division. This includes the DIC, the Motorcycle Safety Course, and the Remedial Driver Training Course. Special classes are conducted at the request of commanders. Send request to the Director, Safety Division (B 51).

16004. SCHEDULING

1. The DIC will be conducted twice monthly. Spaces in this class are requested, in advance, by letter,

2. The Motorcycle Safety Course is conducted monthly from April - October to support personnel needs. Individuals will schedule their own attendance by memorandum to the Driver Training Branch at Bldg. 1001.

3. Remedial Driver Training is a course conducted on the last Saturday of each month. Spaces for this class will be assigned by the MCB Traffic Court Officer, or the individual's CO, and will be coordinated with the Driver Training Branch.

4. Dependents and other licensed drivers who are required to attend these courses will schedule themselves by contacting the Driver Training Branch at 703-784-2120.

16005. RESPONSIBILITIES

1. Commanders/Directors/Activity Heads

a. Ensure that SRB's/OQR's of personnel, are screened upon joining their activities, and that personnel are identified for attendance in the Drivers Training Courses of Instruction per the provisions of this chapter.

b. Ensure that unit/activity training officers identify and schedule personnel, requiring driver improvement training, to the Driver Training Branch, 703-784-2120.

c. Ensure appropriate entries are entered into the individual's SRB/OQR upon successful completion of the designated course(s).

d. Commanders and Activity heads are responsible for the proper assignment, supervision, safe operation of motor vehicle operators, and implementation of MCO 5100.19 or applicable.

e. Ensure supervisors conduct and document Pre-Departure Safety Briefings for all Marines under 26 years of age prior to their departure to a permanent change of station, when traveling extended distances (beyond established out-of-bounds limits) on leave or when the member is departing on extended liberty (more than 48 hours). Documentation of these briefings is to be maintained by the supervisor for 30 days. The briefings should cover appropriate mishap prevention information such as mode of travel, allowing sufficient time and rest, safe driving practices, etc.

2. Director, Safety Division. Provides management oversight for the safe driving program.

3. SNCOIC, Driver Training Branch, Safety Division. The Chief Instructor, Driver Training Branch will:

a. Maintain liaison with motor transport officers, organizational training officers/safety officers, and the Director, Safety Division in the area of safe driver licensing and training.

b. Provide overall supervision, scheduling, conduct, and coordination of the Driver Training Program courses of instruction.

c. Prepare and issue certificates of completion.

d. Prepare and maintain class records and training statistics.

e. Submit personnel attendance reports as required.

f. Maintain appropriate records and files for historical records.

g. Perform as a member of the Safe Driving Council's Ad Hoc Committee.

h. Ensure monthly seatbelt checks are performed.

4. Motor Vehicle Operators. Motor vehicle operators will comply with the provisions of this Manual and appropriate regulations.

5. Motorcycle Operators. A commercially available mesh/fabric vest or other upper torso garment will be worn as the outer garment. The garment must not be covered or concealed, such as by a backpack. The garment will be bright yellow, international orange or lime green and will have two 1 1/2 inches to 2 inches wide vertical or horizontal retro-reflective strips, front and back. The vest is authorized for wear by Marines in uniform until the Marine gets off the motorcycle.

CHAPTER 17

LEAD SAFETY

CHAPTER 17

LEAD SAFETY

17000. PURPOSE. To establish the procedures and requirements for the MCB, Quantico Lead Safety Program.

17001. SCOPE. Provisions of this chapter apply to all lead operations conducted in or on MCB, Quantico buildings, grounds, structures, and equipments.

17002. POLICY. To reduce potential and actual lead exposures to levels as low as reasonably achievable.

17003. BACKGROUND

1. Lead has long been a recognized health hazard. Lead can damage the nervous system, kidneys, and reproductive systems. Chronic lead exposure can initially damage the blood forming organs, Higher levels can result in reproductive dysfunction in both men and women, and it can cause peripheral nerve and central nervous system changes. Lead inhibits heme synthesis and at high levels leads to anemia. Lead can pass through the placenta and lead levels in the mother's blood are comparable to concentrations of lead in the umbilical cord at birth. The fetus and newborn may be at least as susceptible to neurological damage as young children.

2. Buildings constructed before 1978 are likely to contain lead-based paint. MCB, Quantico has a long history. Operations and areas aboard MCB, Quantico in which personnel may be exposed to lead include the following:

a. Weapons firing, weapons cleaning, and range and trap cleaning.

b. Breaching training using lead-encased flex linear charge.

c. Performing hot work such as welding, cutting, brazing, and soldering on lead-containing or coated materials.

d. Application and removal of lead-containing paint or coatings on buildings and structures, and operational equipment.

e. Lead contaminated soil adjacent to buildings and structures.

f. Playground equipment coated with lead-containing paint.

g. Passive exposure to lead dust from lead-containing paint in housing units and office spaces.

h. Use of lead containing paints and glazes in hobby shops.

i. Family hobbies and purchase of products containing lead.

j. Alterations to radiation shielding.

17004. RESPONSIBILITIES

1. MCB, Quantico Lead Safety Program Manager (LSPM)

a. The LSPM will be appointed in writing by the Director of the MCB, Quantico Safety Division, who will ensure the LSPM receives appropriate training IAW MCO P5100.8.

b. Refer to Industrial Hygiene (IH) any requests for evaluating operations involving exposure to lead.

c. Working with Naval Medical Clinic (NMCL) IH, ensure a personnel protective equipment (PPE) survey is completed IAW MCO P5100.8. Provide for required PPE training of personnel involved in lead operations. Purpose, selection, fit -testing, use, and limitations of respirators will be included. Coordinate respirator training and fit testing with the Respirator Protection Program Manager.

d. Notify IH of any personnel entering or working inside of lead controlled boundaries and request personal air sampling services.

e. Ensure work center supervisors are informed of proper safety equipment acquisition procedures.

f. Ensure warning signs are posted at each designated lead work area.

g. Conduct inspections of designated lead work areas within 5 days of any significant change in either the work process or equipment.

h. Review, with other safety specialists, all contracts and work requests, for renovation and demolition, for lead abatement considerations.

2. co NMCL

a. Occupational Health (OH)

(1) Conduct Lead Medical Surveillance Program PAW MCO P5100.8, chapter 17.

(2) Notify IH and LSPM of work centers where personnel have elevated blood levels.

b. Pediatric Clinic

(1) Conduct Pediatric Screening examinations IAW the current BUMED Navy Pediatric Lead Exposure Prevention Program recommendations.

(2) Notify OH of children with elevated blood levels.

c. IH

(1) Evaluate work operations involving lead and conduct air sampling as required.

(2) Develop and recommend lead control boundaries.

(3) In coordination with MCB, Quantico LSPM and work center supervisors, recommend required PPE.

(4) Advise work center supervisors of personnel to be included in the medical surveillance program.

(5) Provide technical support and guidance to the LSPM,

(6) Provide training, with the MCB, Quantico LSPM, to designated lead workers IAW MCO P5100.8, chapter 17. The MCB, Quantico LSPM will provide general Lead Awareness **Training**, with the NMCL IH, to personnel who are potentially exposed to lead in their work environment.

(7) Within 5 working days after receipt of a health hazard evaluation, notify each worker verbally of his or her overexposure. A formal written response should be sent to the worker within 30 days of receipt of the health hazard evaluation.

(8) Review all contracts and work requests, for renovation and demolition, for lead abatement considerations.

(9) Evaluate ventilation systems used to control personnel exposure to lead quarterly or as needed for any significant change in either the work process or equipment. Only annual evaluations are required where monitoring devices are installed and work center personnel are instructed in their function and to contact the MCB, Quantico LSPM in case of malfunction.

(10) Notify the MCB, Quantico LSPM of work centers where personnel have elevated blood levels, detected by the Medical Surveillance and Pediatric Screening Programs.

3. AC/S G-5

a. Appoint in writing a Lead and Asbestos Operations & Maintenance (O&M) Program Manager per MCCDC Quantico Family Housing Lead and Asbestos Assessment of August 1997 and ensure appropriate training is received, per 40 CFR 745.226.

b. Advise MCB, Quantico LSPM annually of the status of the O&M Program.

c. Notify the MCB, Quantico LSPM before commencing operations believed to generate any amount of airborne lead in MCB, Quantico housing units, playgrounds, buildings, and structures.

d. Inform MCB, Quantico LSPM of results of all analysis performed on water for lead in drinking water quality standards.

e. Ensure lead containing waste material is disposed of IAW applicable Federal, state laws, and local regulations.

f. Maintain local exhaust ventilation systems used to control personnel exposure to lead.

g. Initiate and maintain a contract for analysis of suspected lead containing material.

4. Commanders/Division Directors

a. Ensure work operations using lead or materials containing lead are conducted per this Manual and references MCO P5100.8, 29 CFR 1910.1025, and 29 CFR 1926.62.

b. Budget resources to meet lead control requirements, per Federal and state laws, and local safety and OH regulations.

5. Supervisors

a. Notify the MCB, Quantico Safety Division LSPM and NMCL IH before commencing operations believed to generate any amount of airborne lead.

b. Ensure personnel are trained and are knowledgeable in the work to be conducted, per 40 CFR 745.226.

c. Ensure personnel receive required medical surveillance.

d. Provide technical support and guidance on written aspects of the Lead Safety Program.

e. After consulting with the MCB, Quantico LSPM and IH, provide required PPE for personnel.

f. Notify MCB, Quantico LSPM and IH of any significant change in the process or equipment that may affect personnel exposures to lead.

g. Establish work-center SOP and coordinate initial and annual reviews with MCB, Quantico Safety Division LSPM, NMCL IH, and G-5 Natural Resources and Environmental Affairs (NREA).

h. Contact NREA for disposal of lead containing waste, scrap, debris, containers, equipment, and clothing.

i. A copy of the lead standard, 29 CFR 1025 or 29 CFR 1926.62, and its appendices, and any other materials from Occupational Safety and Health Act (OSHA) pertaining to lead will be readily available to all personnel working with lead where there is a potential exposure to lead at any level. This material, and the work center lead SOP, will be presented to personnel by the supervisor prior to or at time of assignment and at least annually thereafter.

6. Personnel Working With Lead

a. Comply with established work control procedures.

b. Properly wear or use prescribed PPE.

c. Report to the supervisor any observed unsafe/unhealthful work condition or work practice.

17005. LEAD EXPOSURE CONTROLS

1. General Controls

a. Permissible Exposure Limit (PEL) and Action Level (AL)

(1) The PEL for an 8-hour time-weighted average (TWA) exposure to airborne lead is 50 micrograms per cubic meter (ug/m3) of air. Engineering and administrative controls shall be implemented, to the extent feasible, to reduce the exposure to below the PEL when an employee's exposure exceeds the PEL for more than 30 days a year. Whenever engineering and work practice controls are not sufficient to reduce exposure to or below the PEL, engineering controls shall nonetheless be use to reduce the exposure to the lowest feasible level and supplement them by use of respiratory protection. Where an employee is exposed above the PEL for 30 days or less per year, engineering controls shall be used to reduce exposures to at least 200 ug/m3. Thereafter, any combination of engineering, work practice, and respiratory protection controls will be used to reduce exposures to or below 50 mg/m3.

(2) The AL for an 8-hour TWA exposure to airborne lead is 30 ug/m3 (without regard to respirator use). Exposure at or above the AL for more than 30 days per year shall require biological monitoring and medical surveillance.

b. Respiratory Protection

(1) All respirators shall be NIOSH/MSHA approved. High efficiency particulate air (HEPA) filters will be used.

(2) Lead workers will be required to be fit-tested every 6 months per reference 29 CFR 1910.1025.

(3) Personnel must be medically qualified by OH, NMCL, before making an appointment for respirator fit-testing and training with the MCB, Quantico Safety Division Respiratory Protection Program Manager (RPPM).

c. Basic Principles. Basic principles for controlling hazards in occupational environments will be employed including substitution with less hazardous materials, engineering controls, administrative controls, and use of PPE, in that order.

d. Housekeeping. Work surfaces will be maintained as free of lead dust as is practical and will be cleaned up with a HEPA filtered vacuum cleaner. Personnel may only use wet sweeping and brushing when vacuuming or other equally effective methods have been tried and found to be ineffective or infeasible. Tri-sodium phosphate based cleaners is recommended. Compressed air and dry sweeping will not be used to clean surfaces or clothing.

e. Personal Hygiene. Eating, drinking, chewing or smoking tobacco products, application of cosmetics and storage of food products is prohibited in lead work areas. Washing hands is important to minimize potential ingestion of lead particles.

f. Warning Signs. Warning signs shall be used at each location where airborne lead may exceed the PEL. These signs may contain a listing of required PPE and shall state as a minimum, in black letters on a yellow background:

WARNING

LEAD WORK AREA

POISON

NO SMOKING, EATING, OR DRINKING

2. Corrosion Control Operations

a. Shrouded tools shall be used to collect dust at the point of origin and a vacuum equipped with HEPA filters will be used to capture the lead contaminated dust. Emissions shall not be exhausted into another workspace. At no time will a non-HEPA vacuum be used.

b. Specific vacuum and ventilation requirements will be determined by the MCB, Quantico LSPM and IH.

3. Facility Maintenance Operations

a. The wet method will be used when removing lead containing paints. Power sanding and hand sanding is prohibited.

b. Additional requirements may be necessary based on the IH evaluation.

4. Indoor Firing Ranges and Weapons Testing Facilities

a. Local exhaust ventilation will be the primary means of controlling exposure. Used filters will be disposed of by contract personnel per Federal and state laws, and local regulations.

b. Range and trap cleaning of lead will be performed by contract personnel with oversight conducted by Public Works Branch.

17006. TRAINING AND EDUCATION

1. For purposes of training, designated lead workers are defined as those personnel who are exposed to airborne lead concentrations in excess of the OSHA action level which is 30 micrograms per cubic meter (ug/m3) on a full shift TWA basis (i.e., at least 7 hours). All training for lead workers will be per 40 CFR 745.226. Initial training and qualification shall be conducted before allowing any designated lead worker to work with or be exposed to lead dust or fumes. Refresher training will be conducted annually thereafter. Training will include the following:

a. Description of operation(s) and specific hazards.

b. Protective measures in effect or planned (i.e., engineering controls, change rooms, laundry facilities, PPE, etc.).

c. Respiratory protection if entered into the Respiratory Protection Program.

d. Medical Surveillance Program.

e. Health effects of lead.

f. Review of lead regulations.

g. Employees rights and responsibilities.

h. Employee notification and monitoring results.

2. Residents of MCB, Quantico housing will be informed by the Housing Office of the presence of lead prior to occupancy as well as their responsibilities. Health educational material, required by EPA and HUD, will also be provided.

CHAPTER 18

BASE RADIATION SAFETY PROGRAM

CHAPTER 18

BASE RADIATION SAFETY PROGRAM

18000. PURPOSE. To prescribe policy and guidance for the Base Radiation Safety Program.

18001. BACKGROUND. The Marine Corps uses ionizing radioactive material and ionizing radiation producing equipment in accomplishing its mission. The Base Radiation Safety Program will manage the ionizing radiation hazard from that material and equipment. MCO 5104.3 establishes the Radiation Safety Program for the Marine Corps.

18002. SCOPE. The ionizing radioactive material and ionizing radiation producing equipment requirements of this chapter apply to all aboard MCB, Quantico excluding the Naval Medical Clinic (NMCL) and the Naval Dental Clinic (NDCL). NMCL and NDCL policy is described in NAVMED P-5055.

18003. MCB POLICY. To maintain ionizing radiation exposure from Marine Corps operations to a level 'As Low As Reasonably Achievable" (ALARA), and not to exceed 0.002 rem per hour in an unrestricted area or 0.1 rem per year.

18004. DEFINITIONS

1. Ionizing Radiation. Radiation that produces ion pairs as it passes through matter; includes gamma ray, x-ray, alpha ray, beta ray ; excludes microwave and laser radiation.

2. Radioactive Commodity. Item containing radioactive material equal or exceeding limits established in 10 CFR 20, appendix C. Will have a radiation symbol on it.

3. Radioactive Device. Manufactured article containing radioactive commodity, such as tritium watch, tritium compass, tritium front sight, tritium range indicator, tritium aircraft exit marker; excludes tritium building exit signs. Will have a radiation symbol on it.

4. Radioactive Material. Material that spontaneously emits ionizing radiation.

5. Radiography. Producing a picture using a radioactive source or x-ray generator; nondestructive testing.

6. Rem. A unit of radiological measurement; the dose equal to the absorbed dose in RAD multiplied by the quality factor.

7. Radiation Protection Officer (RPO).

18005. PROGRAM MANAGEMENT. Per MCO 5104.3, the CG MCB shall appoint, in writing, a qualified Installation Radiation Safety Officer (IRSO). The IRSO shall be assigned to the Safety Division. The IRSO shall implement the Base Radiation Safety Program consistent with Federal, DoD, DON, and Marine Corps standards.

18006. BASIC PROGRAM ELEMENTS

1. The IRSO will:

a. Perform radiation protection surveys every 2 years and after significant changes.

b. Provide program guidance.

c. Have the authority to halt unsafe operations.

d. Investigate incidents.

e. Review/approve procurement requests for items with specific activity greater than 0.002 micro curies per gram and equal to or greater than quantities in table 3 of NAVSEA S0420-AA-RAD-010.

f. Maintain an inventory of radioactive devices.

g. Provide the Fire Protection/Prevention Branch the locations with radioactive material.

h. Prepare, activate and review annually the Emergency Action Plan, as detailed in paragraph 6 below.

i. Provide training to Fire Protection/Prevention Branch personnel on emergency procedures involving radiation sources. This training will be 2 hours initially, and annually, thereafter.

2. The AC/S G-3 and G-4, Marine Corps University, SNCO Academy, Weapons Training Battalion, OCS, TBS, and Museum will appoint an RPO in writing to:

a. Review/approve procurement requests for items with specific activity greater than 0.002 micro curies per gram and equal to or greater than quantities in table 3 of NAVSEA S0420-AA-RAD-010.

b. Ensure proper radioactive material shipping, receipt, and inventory tracking requirements are met per MCO 5104.3.

c. Post operating procedure and emergency action plan in storage areas with radioactive devices i.e. tritium compasses, not-installed tritium devices, etc. Post storage areas "Caution - Radioactive Material".

d. Store no more than 2,264 tritium devices (1,000. curies) in one area. Storage area must be ventilated; 12 air changes per day.

e. Provide awareness training initially and periodically to personnel without exposure who may see radiation signs at the command.

f. Report incidents immediately by phone to the Command Duty Officer and IRSO at 703-784-2866.

g. Conduct and document inspections quarterly to ensure the above actions are carried out.

h. Provide an inventory of radioactive devices to the IRSO annually.

3. The CO HMX-1, will ensure the conduct of X-ray radiography per Federal, DoD, DON, and Marine Corps standards.

4. The CO NMCL will provide radiation physicals and appoint a Radiation Health Officer to manage the Radiation Health Program per NAVMED P-5055.

5. Maintenance will not be done on tritium (or any radioactive) devices; devices requiring maintenance will be sent to Marine Corps Logistics Base, Albany. Contact the G-4 RPO for guidance.

6. Emergency Action Plan. In the case of a damaged radioactive device, the senior person present shall take the following steps to control the emergency:

a. Sound the alarm by voice, radio, phone, etc.

b. Move personnel away from the affected area.

c. Aid the injured.

d. Prevent further spread of contamination.

e. Contact the RPO and IRSO at 703-784-5126.

APPENDIX A

DEFINITIONS

1. ACTIVITY HEAD. The person responsible for a separate command, division, or activity.

2. ABATE. To eliminate or reduce an unsafe or unhealthful condition and by coming into compliance with the applicable standards criteria or taking equivalent protective measures.

3. CIVILIAN. Includes General Schedule and Wage Grade workers (including National Guard and Reserve Technicians); Nonappropriated Fund workers; Youth/Student Assistance Program workers.

4. FIRST LINE SUPERVISOR. The next person up the chain above a worker; has direct control of a worker and/or operation.

5. MILITARY. Includes all military personnel on active duty; Reserve or National Guard personnel on active duty or in drill status; Reserve Officer Training Corps cadets, when engaged in directed training activities; and Foreign National military personnel assigned to Marine Corps Commands.

6. IMMINENT DANGER. Applies to conditions or practices in any workplace which pose a danger that could reasonably be expected to cause death or severe physical harm immediately or before the imminence of such danger can be eliminated through normal procedures (hazard severity category I or II and mishap probability category A).

7. INSTALLATION. A facility or grouping of facilities located in the same vicinity that support particular Marine Corps functions. Installations may include locations such as posts, camps, or stations.

8. QUALIFIED SAFETY and HEALTH PERSONNEL. Includes persons who meet the Civil Service Standards for Safety Director/Specialist GS-018, Safety Engineer GS-803, Safety Technician GS-019, Medical Officer GS-602, Health Physicist GS-1306, Industrial Hygienist GS-690, Occupational Health Nurse GS-610, or other personnel determined to be qualified for Occupational Safety and Health functions.

APPENDIX A

DEFINITIONS

9. MILITARY-UNIQUE EQUIPMENT, SYSTEMS, OPERATIONS, OR WORKPLACES. Equipment and systems that are unique to the national defense mission, including the operation, testing, and maintenance procedures dictated by the design configuration. Examples are: military weapons, aircraft, ships, submarines, missiles and missile sites, early warning systems and sites, military space systems, ordnance, tanks, and tactical vehicles. Operations or workplaces that are uniquely military, such as field maneuvers, combat training, naval operations, military flight and missile operations, associated research, test, and development activities, and actions required under emergency conditions.

10. RISK ASSESSMENT. An expression of potential loss, described in terms of hazard severity, mishap probability, and exposure to hazard.

11. HAZARD SEVERITY. An assessment of the expected consequence, defined by degree of injury or occupational illness that could occur from a hazard.

12. ESTIMATED HAZARD SEVERITY. A judgment of hazard severity in which a hazard is classified by an uppercase Roman numeral according to the criteria described in this enclosure.

13. MISHAP PROBABILITY. An assessment of the likelihood that, given exposure to a hazard, a mishap will result.

14. EXPOSURE TO HAZARD. An expression of personnel exposure that takes into account the number of persons exposed and the frequency or duration of exposure as depicted in the enclosure.

15. RISK ASSESSMENT CODE. An expression of the risk associated with a hazard that combines the hazard severity, mishap probability, and personnel exposure into a single Arabic numeral.

16. HAZARDOUS CONDITION. An existing condition that violates established standards or that could, or will, contribute to a mishap, as determined by qualified safety, fire, or health officials.

17. UNSAFE ACT. An action that violates established standards that could, or will, contribute to a mishap.

APPENDIX B

CHEMICAL HYGIENE PLAN

Ref: (a) 29 CFR 1910.91.1450
(b) 29 CFR 1910
(c) NEHC-TM91-5
(d) 29 CFR 1910.1200

1. ___(2)___ is appointed as the Chemical Hygiene Officer (CHO) for this site.

2. Permissible Exposure Limits (PEL) for chemicals used at this site are established in reference (b). The potential for actual worker exposure at this site will be assessed during the industrial hygiene surveys performed by the Occupational Health/Industrial Hygiene (IH) Department of the Naval Medical Clinic (NMCL). The results of this assessment will be provided in a formal report.

a. The current assessment of the most recent survey of this site (dated 3) is that there is no potential for worker overexposure to any chemicals used in laboratory operations. The working conditions currently in effect are sufficient to prevent overexposure. No local exhaust or additional ventilation needs to be provided to prevent overexposure (if exhaust or other ventilation must be in operation to control exposure, a plan for testing and maintenance of this system must be described).

b. If exposure conditions change, the IH Department, NMCL, will be contacted at 703-784-2591/3219.

c. If exposure to chemicals in excess of one-half the PEL is anticipated for 10 days per quarter or 30 days per year, annual medical surveillance per reference MCO 5100.8 will be performed.

3. Irrespective of the level of exposure, all workers working with chemicals in laboratory conditions will be provided with information and training per reference (d).

a. Training will be performed annually.

b. Material Safety Data Sheets (MSDS) for chemicals used at this site are located -4 _____.

4. Safety and Health SOP

a. Personnel will use safety eyewear when working with chemicals listed as eye hazardous on MSDS (address of the location of eyewear storage and the location and operation of emergency eyewash, if available).

b. Personnel will not eat, smoke, or apply cosmetics in the laboratory area, and will wash hands prior to eating, smoking, or applying cosmetics elsewhere.

c. (Address other issues such as fire protection).

Key

1. Site name and location.

2. Name of designated CHO.

3. Date of most recent industrial hygiene survey.

4. Where MSDS for chemicals used in laboratory are retained.

APPENDIX C

EXPOSURE CONTROL PLAN FOR BLOODBORNE PATHOGEN PROGRAM (BPP)

Ref: **(a)** 29 CFR 1910.1030

1. Per the reference, subject plan is put into effect. This plan does not address exposure at the Naval Medical Clinic (NMCL) or Dental Clinic (NDCL), which have their own plans.

2. Personnel working in the following job classifications have been determined by the BPP Manager to have potential for contact with human blood or blood products in the performance of their duties. Military and civilian workers will receive pre-employment and annual refresher training. Military will receive the hepatitis B vaccination series. Civilians will be offered the vaccination at no charge, on base and during their working hours.

a. Firefighters, fire officers, paramedics/rescue personnel and aircraft rescue firefighters.

b. Scty Bn and the following Brig personnel: corpsman, valuables supervisor, driver, programs/parole chief, counselor, and indoctrination/training supervisor.

c. NCIS agents as a result of physical contact with violent individuals.

d. Dependent Schools personnel determined to be, "first responders."

e. Life guards and pool managers at the All Hands, Officer's pool and Ramer Hall pool.

3. Child Development Center, Family Child Care providers, and Larson Gym personnel will receive pre-employment and refresher training only.

4. The following procedures are to be taken in the event of an exposure incident:

a. An individual suspecting exposure shall report ASAP to the Occupational Health Department, NMCL.

b. The exposure assessment and counseling will be performed by a Military Medicine Department provider.

c. Blood may be drawn at the time of the initial assessment and 6 weeks, 3 months and 1 year thereafter. Every attempt will be made to locate the source patient and blood will be drawn from him/her for analysis.

d. A specially trained counselor will meet with the potentially exposed individual to discuss treatment plans if any. All medical records shall be held in strict confidence.

5. Methods of Compliance

a. Universal precautions shall be implemented to help prevent worker contact with blood or other potentially infectious materials (tissue, semen, vaginal secretions, etc.). All human blood and blood products will be treated as infectious, regardless of the age, sex, or background history of the person.

b. Workers shall wash hands with soap and water **as** soon as feasible after contact with potentially contaminated infectious materials.

c. Eating, drinking, smoking, applying cosmetics or lip balm, and handling of contact lenses is prohibited where contact with potentially infectious materials is possible.

d. Activities involving potentially infectious materials shall be performed in a manner to minimize splashing, spraying and spattering,

e. Contaminated equipment shall be examined prior to servicing or shipping and decontaminated as necessary. The BIOHAZARD label shall be attached to contaminated equipment.

f. Personal protective equipment (PPE) will be provided as appropriate. Multiple sizes of PPE will be available. As a minimum, latex gloves will be worn when contact with blood is expected or obvious (first response to an accident scene, patron receives an accidental bloody nose while playing basketball, etc.). Individuals demonstrating an allergic response to latex will be offered alternative glove material. A face shield will be worn when splashing is expected.

g. Upon leaving work areas, PPE shall be removed to prevent possible exposure to others.

h. PPE shall be inspected prior to and after use to ensure integrity. Reusable PPE may be washed, cleaned or laundered.

i. Contaminated surfaces shall be sanitized immediately with 10 percent bleach solution or other suitable disinfectant.

6. Worker Training

a. The Preventive Medicine Department of the NMCL is responsible for training all medical and dental personnel aboard MCB, Quantico.

b. The Safety Division will train all members identified in paragraphs 2 and 3 at the time of their assignment and annually thereafter.

c. The 14 topics listed in reference (a) must be addressed during training. An instructor will be present and conduct all training. A question and answer period will be provided following all training.

7. Responsibilities

a. Safety Division manages the exposure control of MCB, Quantico except for NMCL and NDCL.

b. NMCL - HBV immunization, exposure follow-up, and healthcare worker training. Make BBP recommendations during Industrial Hygiene surveys.

c. Base Commands and tenant activities provide PPE and ensure program compliance.

APPENDIX D

INDUSTRIAL HYGIENE SERVICE REQUEST

INSTRUCTIONS. If service is required, complete appropriate sections of the form and forward to the Navy Medical Clinic, mail stop B 103 (Attn: Industrial Hygiene Department). This form will be useful in planning the service and tracking request completion.

I. WHERE
COMMAND/DIVISION, etc. (Date)
DEPARTMENT
BLDG#/ROOM#/LOCATION:

II* SERVICE REQUEST
BULK SAMPLING
AIR SAMPLING
PROCESS EVALUATION
INDOOR AIR QUALITY SURVEY (complete IV below)
WORKER TRAINING
INFORMATION REQUEST
OTHER

III. SPECIFIC DESCRIPTION OF SERVICE DESIRED IN II:

IV. IF INDOOR AIR QUALITY INVESTIGATION PROVIDE the following is applicable:
description of problem

date discovered
if worker complaint, nature of symptoms

number of personnel with symptoms can windows be opened?

V. SIGNATURE PHONE NUMBER

IH USE ONLY

Date received
Date resolved
Resolution: